Compact Product Suite
Product Catalog

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Compact Product Suite

The Compact Product Suite is a comprehensive family of process automation and control products for your system integration and OEM business. It is the keystone to any automation task in the process industry where engineering efficiency matters.

These products can be combined as a tailored solution or, as standalones to complement an existing solution. However you use them, they will ensure high availability and enable increased productivity.

The Compact Product Suite is a set of automation building blocks that help you achieve the quality and productivity your production site deserves. It helps you focus on the missing block/component to add value to the production facility.

Whether it's process controllers, field interfaces or HMIs, our comprehensive suite of products enables automation with seamless perfection. When it comes to finding the best solution for your process, ABB's Compact Product Suite is your answer.

Every product in the Compact Product Suite portfolio provides the highest level of performance, security, connectivity and reliability in its class. This is the result of ABB's 50 plus years of proven expertise in automation control and technologies in the process Industry. From the process field, to panels, to your central operator room, Compact Product Suite will fullfill all your automation needs.

Compact HMI 6.0.3.2

Compact HMI is an easy-to-use and fully equipped PC-based SCADA system for real-time operation of your plant. It offers the latest ergonomic design based on high performance graphics to take afull control of your process and data.

Based on the premium technology of ABB's System 800xA DCS with its leading object oriented engineering platform, it can be used in a variety of diverse industries, ranging from a single operator workstation, with 50 signals and scale up to applications with several thousand signals and multiple workplaces.

Designed with Microsoft Windows® standard of interaction, Compact HMI supports Windows 8.1, Windows 10 2016 LTSB, Windows Server 2012 R2 and Windows Server 2016. This provides exceptional ease of use, unmatched performance and cost savings.
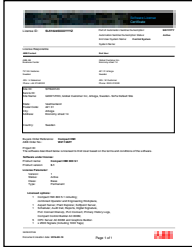
Another feature is the high performance pre-fabricated, re-usable graphics library that is based on the industry best-practice principles to help quick creation and utilization of graphic displays.

Not only can Compact HMI directly interface to a large number of OPC-compliant controllers but also it comes with built in drivers to connect to major PLCs.

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Control System Lifecycle Management Program

Control System Lifecycle Management Program

Automation Sentinel is the ABB control system lifecycle management program for the Extended Automation, Freelance, Compact Product Suite, Symphony Plus and OCS product lines. ABB recommends its customers to use Automation Sentinel for all its installed control systems. With this program, customers can keep control software up-to-date and maintain a flexible path forward to new system software technology. It provides services to maintain and continually advance and enhance your ABB control system installation. You may choose the level of maintenance and upgrade support that works best for your immediate needs and long-term production targets.

Read more about our Automation Sentinel Program and its many valuable services here:
https://new.abb.com/control-systems/service/offerings/service-agreements

Please contact your local sales representative for detailed information on the program and on how to order Automation Sentinel subscriptions.

Compact HMI Base System

Compact HMI Base System		Article no.	
	Compact HMI 6.0.3 Media (USB) Compact HMI 6.0.3.2 installation media on a write protected USB drive. Manuals as PDFs. Media can also be downloaded from ABB Library or MyABB/ My Control System. *NO LICENSE INCLUDED*	3BSE091823R1	
	Compact HMI 6.0.3 Base License Base License for one combined HMI Operator and Engineering Workplace Server Plant Explorer, Aspect Server and Softpoint Server, Scheduler, Primary History Logs, PLC Connect, PLC Connect Dial-Up, Compact HMI Alarm Operations, SMS & Email Messaging, Audit trail, Advanced Access Control, Digital Signature, Graphics Builder and Symbol factory. *NO MEDIA INCLUDED*	3BSE091827R1	

Compact HMI Base System
Signal Additions

Signal Additions		Article no.	
	Compact HMI 6.0.3 Base System signals.		
	50 Signals	3BSE091828R1	
	500 Signals	3BSE091829R1	
	2500 Signals	3BSE091830R1	

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Compact HMI Base System
Snapshot Reports

Compact HMI 6.0.3 Snapshot Reports		Article no.	
	Makes it possible to create aspects that automatically executes a query and produces a report consisting of properties of objects in the system.	3BSE091831R1	

Compact HMI Base System
HMI Clients

HMI Operator Workplace Clients		Article no.	
	Additional clients to a Compact HMI base system need to have an equal number of signals as the base system use.		
	Operator Workplace Client – 200 Signals One additional Compact HMI 6.0.3 Operator Workplace Client, Process Graphics, Alarm and events, Trends, Reports.	3BSE091833R1	
	Operator Workplace Client – 500 Signals One additional Compact HMI 6.0.3 Operator Workplace Client, Process Graphics, Alarm and events, Trends, Reports.	3BSE091834R1	
	Operator Workplace Client – 1000 Signals One additional Compact HMI 6.0.3 Operator Workplace Client, Process Graphics, Alarm and events, Trends, Reports.	3BSE091835R1	
	Operator Workplace Client – 2000 Signals One additional Compact HMI 6.0.3 Operator Workplace Client, Process Graphics, Alarm and events, Trends, Reports.	3BSE091836R1	
	Operator Workplace Client – 5000 Signals One additional Compact HMI 6.0.3 Operator Workplace Client, Process Graphics, Alarm and events, Trends, Reports.	3BSE091837R1	
	Operator Workplace Client – 10000 Signals One additional Compact HMI 6.0.3 Operator Workplace Client, Process Graphics, Alarm and events, Trends, Reports.	3BSE091838R1	

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Compact HMI Base System
Office Workplaces

Office Workplaces		Article no.	
	C HMI Smart Client Workplace Includes access to system information from the office network. Possibility to View Process Graphics 2 displays, Trend displays, Build/view business graphics, historic data.	3BSE091839R1	

Compact HMI Base System
Dongles

Dongles		Article no.	
	License dongle for USB Port		
	For use in 800xA or Compact HMI systems. To be used with 800xA 5.1 Rev A and later.	3BSE064644R1	

Compact HMI 6.0.3 Expansion

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Compact HMI Base System
Signal Additions

Signal Additions	Article no.	
Signals additions for Compact HMI 6.0.3 Base System.		
50 Signals	3BSE091828R1	
500 Signals	3BSE091829R1	
2500 Signals	3BSE091830R1	

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Compact HMI Base System
Snapshot Reports and Symbol Factory for PG2

Snapshot Reports and Symbol Factory for PG2	Article no.	
Compact HMI 6.0.3 Snapshot Reports Makes it possible to create aspects that automatically executes a query and produces a report consisting of properties of objects in the system.	3BSE091831R1	
Compact HMI 6.0.3 Symbol Factory for PG2 Support for Symbol Factory process graphics 2 items in graphics displays. Symbol factory is included in new Compact HMI 6.0.3 base systems. This is only available for systems which has been upgraded to Compact HMI 6.0.3 and does not have a license for Symbol Factory.	3BSE091832R1	

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Compact HMI Base System
HMI Clients

HMI Operator Workplace Clients	Article no.	
Additional clients to a Compact HMI base system need to have an equal number of signals as the base system use.		
Operator Workplace Client – 200 Signals One additional Compact HMI 6.0.3 Operator Workplace Client. Process Graphics, Alarm & events, Trends, Reports.	3BSE091833R1	
Operator Workplace Client – 500 Signals One additional Compact HMI 6.0.3 Operator Workplace Client. Process Graphics, Alarm & events, Trends, Reports.	3BSE091834R1	
Operator Workplace Client – 1000 Signals One additional Compact HMI 6.0.3 Operator Workplace Client. Process Graphics, Alarm & events, Trends, Reports.	3BSE091835R1	
Operator Workplace Client – 2000 Signals One additional Compact HMI 6.0.3 Operator Workplace Client. Process Graphics, Alarm & events, Trends, Reports.	3BSE091836R1	

Compact HMI Base System
HMI Clients

HMI Operator Workplace Clients		Article no.	
	Operator Workplace Client – 5000 Signals One additional Compact HMI 6.0.3 Operator Workplace Client. Process Graphics, Alarm & events, Trends, Reports.	3BSE091837R1	
	Operator Workplace Client – 10000 Signals One additional Compact HMI 6.0.3 Operator Workplace Client. Process Graphics, Alarm & events, Trends, Reports.	3BSE091838R1	

Compact HMI Base System
Office Workplaces

C HMI Smart Client Workplace		Article no.	
	Compact HMI 6.0.3 Smart Client Workplace. Includes access to system information from the office network. Possibility to view Process Graphics 2 displays, trend displays, build/view business graphics, historic data.	3BSE091839R1	

Compact HMI Base System
Client Signal Expansions

Client Signal Expansions		Article no.	
	Compact HMI 6.0.3. Operator Workplace Cliant Signal Expansions from 200 to 10 000 signals.		
	Client Signal Expansion 200 to 500 signals	3BSE091840R1	
	Client Signal Expansion 500 to 1000 signals	3BSE091841R1	
	Client Signal Expansion 1000 to 2000 signals	3BSE091842R1	
	Client Signal Expansion 2000 to 5000 signals	3BSE091843R1	
	Client Signal Expansion 5000 to 10000 signals	3BSE091844R1	

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Compact HMI 6.0.1 Expansion

Compact HMI Base System
Signal Additions

Signal Additions		Article no.	
	Signals additions for Compact HMI base system.		
	Compact HMI Base System signals, 50 50 Signals for Compact HMI 6.0.1 Base System.	3BSE084257R50	
	Compact HMI Base System signals, 500 500 Signals for Compact HMI 6.0.1 Base System.	3BSE084257R500	
	Compact HMI Base System signals, 2500 2500 Signals for Compact HMI 6.0.1 Base System.	3BSE084257R2500	

Compact HMI Base System
HMI Clients

HMI Operator Workplace Clients		Article no.	
	Operator Workplace Client, 200 signals One additional Compact HMI 6.0.1 Operator Workplace Client. Process Graphics, Alarm and events, Trends, Reports. Additional clients to a Compact HMI base system need to have an equal number of signals as the base system use.	3BSE084259R200	
	Operator Workplace Client, 500 signals One additional Compact HMI 6.0.1 Operator Workplace Client.Process Graphics, Alarm and events, Trends, Reports. Additional clients to a Compact HMI base system need to have an equal number of signals as the base system use.	3BSE084259R500	
	Operator Workplace Client, 1000 signals One additional Compact HMI 6.0.1 Operator Workplace Client. Process Graphics, Alarm and events, Trends, Reports. Additional clients to a Compact HMI base system need to have an equal number of signals as the base system use.	3BSE084259R1000	
	Operator Workplace Client, 2000 signals One additional Compact HMI 6.0.1 Operator Workplace Client. Process Graphics, Alarm and events, Trends, Reports. Additional clients to a Compact HMI base system need to have an equal number of signals as the base system use.	3BSE084259R2000	
	Operator Workplace Client, 5000 signals One additional Compact HMI 6.0.1 Operator Workplace Client. Process Graphics, Alarm and events, Trends, Reports. Additional clients to a Compact HMI base system need to have an equal number of signals as the base system use.	3BSE084259R5000	
	Operator Workplace Client, 10000 signals One additional Compact HMI Operator Workplace Client. Process Graphics, Alarm and events, Trends, Reports. Additional clients to a Compact HMI base system need to have an equal number of signals as the base system use.	3BSE084259R5001	

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Compact HMI Base System
Office Workplaces

C HMI Smart Client Workplace	Article no.	
Compact HMI 6.0.1 Smart Client Workplace. Includes access to system information from the office network. Possibility to view Process Graphics 2 displays, trend displays, build/view business graphics and historic data.	3BSE084261R1	

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Compact HMI Base System
Client Signal Expansions

Client Signal Expansions	Article no.	
Client Signal Expansion, 200 to 500 Compact HMI 6.0.1 Operator Workplace Client Signal Expansion from 200 to 500 Signals	3BSE084258R200	
Client Signal Expansion, 500 to 1000 Compact HMI 6.0.1 Operator Workplace Client Signal Expansion from 500 to 1000 Signals	3BSE084258R500	
Client Signal Expansion, 1000 to 2000 Compact HMI 6.0.1 Operator Workplace Client Signal Expansion from 1000 to 2000 Signals	3BSE084258R1000	
Client Signal Expansion, 2000 to 5000 Compact HMI 6.0.1 Operator Workplace Client Signal Expansion from 2000 to 5000 Signals	3BSE084258R2000	
Client Signal Expansion, 5000 to 10000 Compact HMI 6.0.1 Operator Workplace Client Signal Expansion from 5000 to 10000 Signals	3BSE084258R5000	

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Compact HMI 5.1 Expansion

Compact HMI Base System
Signal Additions

Signal Additions		Article no.	
	Signal additions for Compact HMI 5.1 Base System. (Total max 10 000)		
	50 Signals	3BSE064066R50	
	500 Signals	3BSE064066R500	
	2500 Signals	3BSE064066R2500	

Compact HMI Base System
HMI System Options

HMI System Options		Article no.	
	Compact HMI Alarm Management Alarm Analysis and Alarm Shelving.	3BSE064069R1	

Compact HMI Base System
HMI Operator Workplace Clients

HMI Operator Workplace Clients		Article no.	
	It is possible to have up to 10 workplaces of any type in total. Additional clients to a Compact HMI base system need to have a equal number of signals as the base system use.		
	Operator Workplace Client – 200 Signals One additional Compact HMI Operator Workplace Client, Process Graphics, Alarm and events, Trends, Reports.	3BSE064068R200	
	Operator Workplace Client – 500 Signals One additional Compact HMI Operator Workplace Client, Process Graphics, Alarm and events, Trends, Reports.	3BSE064068R500	
	Operator Workplace Client – 1000 Signals One additional Compact HMI Operator Workplace Client, Process Graphics, Alarm and events, Trends, Reports.	3BSE064068R1000	
	Operator Workplace Client – 2000 Signals One additional Compact HMI Operator Workplace Client, Process Graphics, Alarm and events, Trends, Reports.	3BSE064068R2000	
	Operator Workplace Client – 5000 Signals One additional Compact HMI Operator Workplace Client, Process Graphics, Alarm and events, Trends, Reports.	3BSE064068R5000	
	Operator Workplace Client – 10000 Signals One additional Compact HMI Operator Workplace Client, Process Graphics, Alarm and events, Trends, Reports.	3BSE064068R5001	

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Compact HMI Base System
HMI Remote Clients

HMI Operator Workplace Remote Clients	Article no.	
Note: It is possible to have up to 10 workplaces of any type in total. Additional clients to a Compact HMI base system need to have a equal number of signals as the base system use.		
HMI Operator Workplace Remote Client - 200 Signals One additional Remote Compact HMI Operator Workplace Client. Process Graphics, Alarm and events, Trends, Reports.	3BSE064070R200	
HMI Operator Workplace Remote Client - 500 Signals One additional Remote Compact HMI Operator Workplace Client. Process Graphics, Alarm and events, Trends, Reports.	3BSE064070R500	
HMI Operator Workplace Remote Client - 1000 Signals One additional Remote Compact HMI Operator Workplace Client. Process Graphics, Alarm and events, Trends, Reports.	3BSE064070R1000	
HMI Operator Workplace Remote Client - 2000 Signals One additional Remote Compact HMI Operator Workplace Client. Process Graphics, Alarm and events, Trends, Reports.	3BSE064070R2000	
HMI Operator Workplace Remote Client - 5000 Signals One additional Remote Compact HMI Operator Workplace Client. Process Graphics, Alarm and events, Trends, Reports.	3BSE064070R5000	
HMI Operator Workplace Remote Client - 10000 Signals One additional Remote Compact HMI Operator Workplace Client. Process Graphics, Alarm and events, Trends, Reports.	3BSE064070R5001	

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Compact HMI Base System
Office Workplaces

Office Workplaces	Article no.	
C HMI Smart Client Workplace Includes access to system information from the office network. Possibility to view Process Graphics 2 displays, Trend displays, Build/view business graphics, historic data.	3BSE079194R10	

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Compact HMI Base System
Client Signal Expansions

Client Signal Expansions	Article no.	
Compact HMI Operator Workplace Client Signal Expansion from 200 to 10 000 signals.		
Client Signal Expansion from 200 to 500 Signals	3BSE064067R200	
Client Signal Expansion from 500 to 1000 Signals	3BSE064067R500	
Client Signal Expansion from 1000 to 2000 Signals	3BSE064067R1000	
Client Signal Expansion from 2000 to 5000 Signals	3BSE064067R2000	
Client Signal Expansion from 5000 to 10000 Signals	3BSE064067R5000	

AC 800M Processor Units

CPU Modules

Several CPU modules are available that vary in terms of processing power, memory size, and redundancy support. Each CPU module is equipped with built in Ethernet port(s) for communication with other controllers and for interaction with operators, engineers, managers, and higher level applications. These ports can be configured for redundancy for those cases where availability is of paramount importance. It is also equipped with two RS-232C ports that can be used for point-to-point communication with programming/debugging tools and with third-party systems and devices.

The AC 800M controller can be configured with Compact Control Builder.

Communication & I/O Modules

To each CPU module, a number of communication and I/O modules can be added, for example:

• Additional RS-232C ports
• PROFIBUS DP, PROFINET IO
• DeviceNet
• IEC 61850
• Ethernet IP
• MasterBus 300
• MODBUS TCP
• S100 I/O
• S800 I/O
• S800L I/O
• S800 for Ethernet

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AC 800M controller with CI modules on
left side and S800 IO module on right side

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AC 800M controller PM891

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AC 800M Controllers selection guide

Features / CPUs	PM851A	PM856A	PM858	PM860A	PM862
Processor Unit	**PM851AK01 incl:** 1 PM851 CPU and required optional items	**PM856AK01 incl:** 1 PM856 CPU and required optional items	**PM858K01 incl:** 1 PM858 CPU and required optional items **PM858K02 incl:** 2 PM858K01	**PM860AK01 incl:** 1 PM860 CPU and required optional items	**PM862K01 incl:** 1 PM862 CPU and required optional items. **PM862K02 incl:** 2 PM862K01
Optional items (partly included in Processor Units, see Price List)	TP830 Baseplate, TP850 CEX-bus term., TK850 CEX-bus cable, TB807, Modulebus term, Battery RAM backup, TB852/TB853 RCU-link term, TB851/TB855/TB856 RCU-link cable, SB822 External Battery Unit, TK212A Tool cable, TC562 Short Distance Modem, TK853V020 Modem cable, BC810K02, BC820K02, CEX-bus Interconnection unit; TK851V010 Connection cable, SD831/SD832/SD833 Power Supply, SS832 Voting Unit, Mains Breaker Kit.				
Clock frequency	24 MHz	24 MHz	33 MHz	48 MHz	67 MHz
Memory (RAM)	8 MB	8 MB	16MB	8 MB	32 MB
From 5.1 FP4	12 MB	16 MB		16 MB	
RAM available for application	2.282 MB	2.282 MB	7.147 MB	2.282 MB	23.521 MB
From 5.1 FP4	6.253 MB	10.337 MB		10.346 MB	
Processor type	MPC860	MPC860	MPC866	MPC860	MPC866
Flash memory for storage of application and data	Yes	Yes	Yes	Yes	Yes
CPU redundancy support	No	No	Yes	No	Yes
Switch over time in red. conf.	-	-	max 10 ms	-	max 10 ms
Performance, 1000 boolean operations (a:=b and c)	0.46 ms	0.46 ms	0.36 ms	0.23 ms	0.18 ms
No. controllers per control projects	32				
No. of applications per control project	1024				
No. of applications per controller	32				
No. of programs per application	64				
No. of tasks per controller	32				
Number of different cycle times	32				
Cycle time per application programs	Down to 1 ms				
Flash PROM for firmware storage	2 MB	2 MB	4 MB	2 MB	4 MB
Power supply	24 V DC (19.2-30 V DC) max 5 % ripple acc. to IEC 61131-2				
Power consumption +24 V	typ/max 180/300 mA	typ/max 180/300 mA	typ/max 210/360 mA	typ/max 180/300 mA	typ/max 210/360 mA
Power dissipation	typ 4.32 W	typ 4.32 W	typ 5.1 W	typ 4.32 W	5.1 W
Power Reservoir	Internal 5 ms power reservoir, sufficient for the CPU to make a controlled power down				
Power supply connector	Detachable 4-pole screw terminal block				
Redundant power supply status inputs	Yes: 2 inputs designated SA, SB (Max 30 V, high level >15 V, low level < 8 V)				
Built-in back-up battery	Type: Lithium, 3.6 V, 0.95 Ah, size 1/2 AA, 0.3 g Lithium content				
Real-time clock stability	100 ppm (approx. 1 h/year)				
Clock synchronization	1 ms between AC 800M controllers by CNCP protocol				
Comm. modules on CEX bus	1	12	12	12	12
Supply current on CEX bus	Supply current: Max 24 V - 2.4 A (fuse 3.15 A fast, PM891 has an embedded auto fuse)				
I/O clusters on Modulebus with non-redundant CPU	1 el. + 1 opt.	1 el. + 7 opt.	1 el. + 7 opt.	1 el. + 7 opt.	1 el. + 7 opt.
I/O clusters on Modulebus with redundant CPU	NA	NA	0 el. + 7 opt.	NA	0 el. + 7 opt.

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Features / CPUs	PM851A	PM856A	PM858	PM860A	PM862
I/O capacity on Modulebus with non-redundant/redundant CPU	Max 24/NA I/O modules	Max 96/NA I/O modules	Max 96/84 I/O modules	Max 96/NA I/O modules	Max 96/84 I/O modules
Modulebus scan rate	0 - 100 ms (actual time depending on number of I/O modules)				
Supply current on Electrical Modulebus	Supply current: Max 24 V - 1.0 A (short circuit proof, fuse 2.0 A), Max 5 V - 1.5 A (short circuit proof)				
I/O capacity on PROFIBUS (remote I/O)	Max 99 I/O stations (max 62 redundant I/O stations), max 24 I/O modules per I/O station (max 12 redundant I/O pairs)				
Ethernet channels	1	2	2	2	2
Ethernet interface	Ethernet (IEEE 802.3), 10 Mbit/s, RJ-45, female (8-pole)				
Control Network protocol	MMS (Manufacturing Message Service) and IAC (Inter Application Communication)				
Recommended Control Network backbone	100 Mbit/s switched Ethernet				
No. of controllers on Control Network	max 50				
RS-232C interface	2 (one general, 1 for service tool)				
RS-232C interface (COM3) (non red.conf. only)	RS-232C, 75-19 200 baud, RJ-45 female (8-pole), not opto isolated, full RTS-CTS support				
RS-232C interface (COM4) (non red.conf. only)	RS-232C, 9 600 baud, RJ-45 female (8-pole), opto isolated, no RTS-CTS support				
Temperature • Operating • Storage	+5 to +55 °C (+41 to +131 °F) -40 to +70 °C (-40 to +158 °F)				
Temperature changes	3 °C/minutes according to IEC/EN 61131-2				
Altitude	2000 m according to IEC/EN 61131-2				
Pollution degree	Degree 2 according to IEC/EN 61131-2				
Corrosion protection	G3 compliant to ISA 71.04				
Vibration	10 < f < 50 Hz: 0.0375 mm amplitude, 50 < f < 150 Hz: 0.5 g acceleration, 5 < f < 500 Hz: 0.2 g acceleration				
Emitted noise	< 55 dB (A)				
Shock, no package	150 m/s2 in 11 ms, 20 g in 3 ms				
Relative humidity	5 to 95 %, non-condensing				
Isolation voltage	Type test voltage: 500 V AC (corresponding to 700 V DC)				
Environmental conditions	Industrial				
Protection class	IP20 according to EN 60529, IEC 529				
Certificates and Standards [1]	CE- marking: Meets EMC directive 2004/108/EC acc. to EN 61000-6-4, EN 61000-6-2 and Low Voltage Directive acc. to EN 61131-2 Electrical Safety: EN 50178, IEC 61131-2, UL 508 Hazardous location: UL 60079-15, cULus Class 1, Zone 2, AEx nA IIC T4, ExnA IIC T4Gc X RoHS compliance: EN 50581:2012 WEEE compliance: DIRECTIVE/2012/19/EU				
TÜV Approval	No	No	No	No	No
Emission	Tested according to EN 61000-6-4 EMC – Generic Emission Standard, Part 2 – Industrial Environment				
Immunity	Tested according to EN 61000-6-2 EMC – Generic Immunity Standard, Part 2 – Industrial Environment				
Dimensions	Width 119 x Height 186 x Depth 135 mm (4.7 x 7.3 x 5.3 in.)				
Weight (including base)	1100 g (2.4 lbs)	1100 g (2.4 lbs)	1200 g (2.6 lbs)	1100 g (2.4 lbs)	1200 g (2.6 lbs)

(1) For detailed information on each module, please visit: **www.compacthardwareselector.com**

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Features / CPUs	PM866A	PM891
Processor Unit	**PM866AK01 incl:** 1 PM866A CPU and required optional items **PM866AK02 incl:** 2 PM866AK01	**PM891K01 incl:** 1 PM891 CPU and required optional items **PM891K02 incl:** 2 PM891K01
Optional items (partly included in Processor Units, see Price List)	TP830 Baseplate, TP850 CEX-bus term., TK850 CEX-bus cable, TB807, Modulebus term, Battery RAM backup, TB852/TB853 RCU-link term, TB851/TB855/TB856 RCU-link cable, SB822 External Battery Unit, TK212A Tool cable, TC562 Short Distance Modem, TK853V020 Modem cable, BC810K02, BC820K02, CEX-bus Interconnection unit; TK851V010 Connection cable, SD831/SD832/SD833 Power Supply, SS832 Voting Unit, Mains Breaker Kit.	
Clock frequency	133 MHz	450 MHz
Memory (RAM) From 5.1 FP4	64 MB	256 MB
RAM available for application	51.389 MB	208.985 MB
Processor type	MPC866	MPC8270
Flash memory for storage of application and data	Yes	Yes
CPU redundancy support	Yes	Yes
Switch over time in red. conf.	max 10 ms	max 10 ms
Performance, 1000 boolean operations (a:=b and c)	0.09 ms	0.043 ms
No. controllers per control projects	32	
No. of applications per control project	1024	
No. of applications per controller	32	
No. of programs per application	64	
No. of tasks per controller	32	
Number of different cycle times	32	
Cycle time per application programs	Down to 1 ms	
Flash PROM for firmware storage	4 MB	16 MB
Power supply	24 V DC (19.2-30 V DC) max 5 % ripple acc. to IEC 61131-2	
Power consumption +24 V	typ/max 210/360 mA	typ/max 660/750 mA
Power dissipation typ.	5.1 W	15.8 W
Power Reservoir	Internal 5 ms power reservoir, sufficient for the CPU to make a controlled power down	
Power supply connector	Detachable 4-pole screw terminal block	
Redundant power supply status inputs	Yes: 2 inputs designated SA, SB (Max 30 V, high level >15 V, low level < 8 V)	
Built-in back-up battery	Type: Lithium, 3.6 V, 0.95 Ah, size 1/2 AA, 0.3 g Lithium content	No
Real-time clock stability	100 ppm (approx. 1 h/year)	50 ppm
Clock synchronization	1 ms between AC 800M controllers by CNCP protocol	
Comm. modules on CEX bus	12	12
Supply current on CEX bus	Supply current: Max 24 V - 2.4 A (fuse 3.15 A fast, PM891 has an embedded auto fuse)	
I/O clusters on Modulebus with non-redundant CPU	1 el. + 7 opt.	0 el. + 7 opt.
I/O clusters on Modulebus with redundant CPU	0 el. + 7 opt.	0 el. + 7 opt.
I/O capacity on Modulebus with non-redundant/ redundant CPU	Max 96/84 I/O modules	Max 84/84 I/O modules
Modulebus scan rate	0 - 100 ms (actual time depending on number of I/O modules), 0 - 300 for PM865 and PM867	
Supply current on Electrical Modulebus	Supply current: Max 24 V - 1.0 A (short circuit proof, fuse 2.0 A), Max 5 V - 1.5 A (short circuit proof)	Not supported
I/O capacity on PROFIBUS (remote I/O)	Max 99 I/O stations (max 62 redundant I/O stations), max 24 I/O modules per I/O station (max 12 redundant I/O pairs)	

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Features / CPUs	PM866A	PM891
Ethernet channels	2	2
Ethernet interface	Ethernet (IEEE 802.3), 10 Mbit/s, RJ-45, female (8-pole)	10/100 Mbit/s
Control Network protocol	MMS (Manufacturing Message Service) and IAC (Inter Application Communication)	
Recommended Control Network backbone	100 Mbit/s switched Ethernet	
No of controllers on Control Network	max 50	
RS-232C interface	2 (one general, 1 for service tool)	1 for service tool (COM 4)
RS-232C interface (COM3) (non red.conf. only)	RS-232C, 75-19 200 baud, RJ-45 female (8-pole), not opto isolated, full RTS-CTS support	Not supported
RS-232C interface (COM4) (non red.conf. only)	RS-232C, 9 600 baud, RJ-45 female (8-pole), opto isolated, no RTS-CTS support	
Temperature • Operating • Storage	+5 to +55 °C (+41 to +131 °F) -40 to +70 °C (-40 to +158 °F)	
Temperature changes	3 °C/minutes according to IEC/EN 61131-2	
Altitude	2000 m according to IEC/EN 61131-2	
Pollution degree	Degree 2 according to IEC/EN 61131-2	
Corrosion protection	G3 compliant to ISA 71.04	
Vibration	10 < f < 50 Hz: 0.0375 mm amplitude, 50 < f < 150 Hz: 0.5 g acceleration, 5 < f < 500 Hz: 0.2 g acceleration	
Emitted noise	< 55 dB (A)	
Shock, no package	150 m/s2 in 11 ms, 20 g in 3 ms	
Relative humidity	5 to 95 %, non-condensing	
Isolation voltage	Type test voltage: 500 V AC (corresponding to 700 V DC)	
Environmental conditions	Industrial	
Protection class	IP20 according to EN 60529, IEC 529	
Certificates and Standards [1]	CE- marking: Meets EMC directive 2004/108/EC acc. to EN 61000-6-4, EN 61000-6-2 and Low Voltage Directive acc. to EN 61131-2 Electrical Safety: EN 50178, IEC 61131-2, UL 508 Hazardous location: UL 60079-15, cULus Class 1, Zone 2, AEx nA IIC T4, ExnA IIC T4Gc X RoHS compliance: EN 50581:2012 WEEE compliance: DIRECTIVE/2012/19/EU	
TÜV Apparoval	No	No
Emission	Tested according to EN 61000-6-4 EMC – Generic Emission Standard, Part 2 – Industrial Environment	
Immunity	Tested according to EN 61000-6-2 EMC – Generic Immunity Standard, Part 2 – Industrial Environment	
Dimensions	Width 119 x Height 186 x Depth 135 mm (4.7 x 7.3 x 5.3 in.)	Width 174 x Height 186 x Depth 94 mm
Weight (including base)	1200 g (2.6 lbs)	1600 g (3.5 lbs)

(1) For detailed information on each module, please visit: **www.compacthardwareselector.com**

Features	BC810	BC820
Article number	3BSE031155R1	3BSE071500R1
Redundancy	Yes	Yes
High Integrity	Yes	No
Performance	Hot swap supported	Hot swap supported
Power supply	Inputs designated L+ and L- 24 V nominal, variation between 19.2 V DC and 30 V DC.	
Power consumption +24 V typ/max	50 mA typical (70 mA max)	120 mA typical (200 mA max)
Power dissipation typ.	1.2 W typical	2.9 W typical
Temperature, Operating	+5 to +55 °C (+41 to +131 °F)	
Temperature, Storage	-40 to +70 °C (-40 to +158 °F)	
Relative humidity	5 to 95 %, non-condensing	
Protection class	IP20 according to EN60529, IEC 529	
CE- marking	Yes	
Electrical Safety	UL508	UL508
Hazardous location	cULus Class 1, Zone 2, AEx nA IIC T4, ExnA IIC T4Gc X	
Marine certificates	ABS, BV, DNV-GL, LR	ABS, BV, DNV-GL, LR
RoHS compliance	EN 50581:2012	
WEEE compliance	DIRECTIVE/2012/19/EU	
Height	185 mm (7.3 in.)	185 mm (7.3 in.)
Width	59 mm (2.9 in.)	59 mm (2.9 in.)
Depth	127.5 mm (5.0 in.)	127.5 mm (5.0 in.)
Weight	1.5 kg (3.31 lbs) (BC810K02 package)	1.4 kg (3.1 lbs) (BC820K02 package)

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Measurements

CPU

119 (4.7)   135 (5.3)

186 (7.3)

PM891

174   94

186
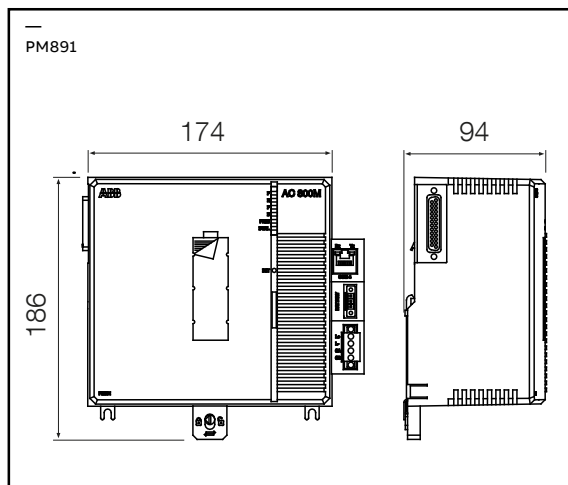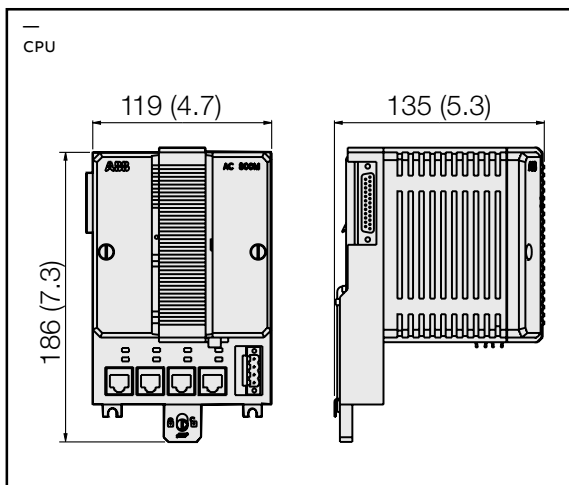
AC 800M Hardware

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AC 800M used for Compact Control 6.0
System Units

System Units	
	The TK212 cable is used for maintenance purposes together with the AC 800M controller it allows you to download the firmware and configure the IP of the controller. Please order a cable (Item A315) together with your first order of PM851AK01, PM856AK01, PM858K01, PM858K02, PM860AK01, PM861AK01, PM861AK02, PM862K01, PM862K02, PM864AK01, PM864AK02, PM866K01, PM866K02, PM866AK01, PM866AK02, PM891K01 or PM891K02.

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AC 800M Hardware
AC 800M Processor Units

AC 800M Processor Units		Article no.	
	PM851AK01 Processor Unit 24 Mhz and 12 MB. Package including: • PM851A, CPU • TP830, Baseplate, width=115 mm • TB850, CEX-bus terminator • TB807, ModuleBus terminator • Battery for memory backup (4943013-6) • No license included	3BSE066485R1	
	PM856AK01 Processor Unit 24 Mhz and 16 MB. Package including: • PM856A, CPU • TP830, Baseplate, width=115 mm • TB850, CEX-bus terminator • TB807, ModuleBus terminator • Battery for memory backup (4943013-6) • No license included	3BSE066490R1	
	PM858K01 Processor Unit 33 Mhz and16 MB. Package including: • PM858, CPU • TP830, Baseplate, width =115mm • TB850, CEX-bus terminator • TB807, ModuleBus terminator • TB852, RCU-Link terminator • Battery for memory backup (4943013-6) • No license included Only compatible with 800xA 6.0.2, Compact Control Builder 6.0.0-1 and onwards. Please see Product Update for more information.	3BSE082895R1	

800M Processor Units		Article no.	
	PM858K02 Redundant Processor Unit 33 Mhz and 16 MB. Package including: • 2 pcs PM858, CPU • 2 pcs TP830, Baseplate, width =115mm • 2 pcs TB807, ModuleBus terminator • 1 pcs TK850, CEX-bus expansion cable • 1 pcs TK851, RCU-Link cable • 2 pcs Battery for memory backup (4943013-6) • No license included Only compatible with 800xA 6.0.2, Compact Control Builder 6.0.0-1 and onwards. Please see Product Update for more information.	3BSE082896R1	
	PM860AK01 Processor Unit 48 Mhz and 16 MB. Package including: • PM860A, CPU • TP830, Baseplate, width=115 mm • TB850, CEX-bus terminator • TB807, ModuleBus terminator • Battery for memory backup (4943013-6) • No license included	3BSE066495R1	
	PM862K01 Processor Unit 67 Mhz and 32 MB. Package including: • PM862, CPU • TP830, Baseplate, width =115mm • TB850, CEX-bus terminator • TB807, ModuleBus terminator • TB852, RCU-Link terminator • Battery for memory backup (4943013-6) • No license included Only compatible with 800xA 6.0.2, Compact Control Builder 6.0.0-1 and onwards. Please see Product Update for more information.	3BSE076940R1	
	PM862K02 Redundant Processor Units Package including: • 2 pcs PM862, CPU • 2 pcs TP830, Baseplate, width =115mm • 2 pcs TB807, ModuleBus terminator • 1 pcs TK850, CEX-bus expansion cable • 1 pcs TB851, RCU-Link cable • 2 pcs Battery for memory backup (4943013-6) • No license included Only compatible with 800xA 6.0.2, Compact Control Builder 6.0.0-1 and onwards. Please see Product Update for more information.	3BSE081636R1	
	PM866AK01 Processor Unit 133 Mhz and 64 MB. Package including: • PM866A, CPU • TP830, Baseplate, width =115mm • TB850, CEX-bus terminator • TB807, ModuleBus terminator • TB852, RCU-Link terminator • Battery for memory backup (4943013-6) • No license included	3BSE076939R1	
	PM866AK02 Redundant Processor Unit 133 Mhz and 64 MB. Package including: • 2 pcs PM866A, CPU • 2 pcs TP830, Baseplate, width =115mm • 2 pcs TB807, ModuleBus terminator • 1 pcs TK850, CEX-bus expansion cable • 1 pcs TB851, RCU-Link cable • 2 pcs Battery for memory backup (4943013-6) • No license included	3BSE081637R1	
	PM891K01 Processor Unit 450 Mhz and 256 MB. Package including: • PM891 CPU Module • TB850, CEX-bus terminator • TB853, RCU Control Link Terminator • No license included	3BSE053241R1	

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800M Processor Units		Article no.	
	PM891K02 Redundant Processor Unit 450 Mhz and 256 MB. Package including: • 2 pcs PM891K01 Processor Unit • 1 pcs TK850V007 CEX-bus Extension Cable • 1 pcs TK855 RCU Data Link Cable • 1 pcs TK856 RCU Control Link Cable • No license included Please note: The BC810K02 is not included in the PM891K02 Redundant Processor Unit kit. In order to make hot replacement of the PM891 CPU, the BC810K02 is required to be ordered separately.	3BSE053242R1	
	SB822 Rechargeable Battery Unit External DIN-rail mounted rechargeable battery unit including lithium-ion battery, 24V DC connector and connection cable TK821V020. Width=85 mm. Equivalent amount of Lithium metal=0,8 g (0,03 oz)	3BSE018172R1	
	MB801V512 Compact Flash card Expansion Compact Flash memory for Panel 800 Version 5. 512 MB	3BSE042257R1	

Extra batteries	
	For extra Lithium batteries (4943013-6), please refer to Business Online (BOL).

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Communication

Serial Interfaces on TP830

Serial Interfaces on TP830		Article no.	
	RS232-C interfaces for protocols COMLI, MODBUS, Siemens 3964R, the free-programmable serial protocol etc. Also for connection of engineering tool.		
	TK212A Tool cable RJ45 8P8C plug RJ45 (male) to D-sub 9 (female). RJ45 8P8C plug (with shell). Cable : UL2464 26 AWG x 8C. Length 3 m.	3BSC630197R1	
	TC562 Short Distance Modem Length < 10 km. Point-to-point up to 1 km at 19 200 bps. G1 compliant. Power 24V d.c. To be used with CI531, CI532Vxx, CI534Vxx and CI853. Width = 55 mm Note! This part is exempted from the scope of 2011/65/EU (RoHS) as provided in Article 2 (4)(c), (e), (f) and (j) therein (ref.: 3BSE088609 - EU DECLARATION OF CONFORMITY - ABB Advant MAster Process Control System)	3BSC630049R1	
	TK853V020 Modem Cable Modem cable for serial interfaces on TP830. Cable for connection between modem TC562 and TP830. Length 2 m	3BSC950201R1	

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Communication Interface selection guide

Supported Communication modules	PROFIBUS DP	RS-232 C	MB300	INSUM	Drivebus	S100 I/O	Satt I/O	MODBUS TCP	IEC 61850
Module	CI854B	CI853	CI855	CI857	CI858	CI856	CI865	CI867/ CI867A	CI868/ CI868A
Protocol	DP-V1 (PA via Linking Device)	MODBUS RTU master, COMLI master/ slave, Siemens 3964R master, User defined protocols	MasterBus 300	IEEE 802.3	ABB's DriveBus	ABB's S100 I/O	ABB's Satt I/O	MODBUS TCP	IEC 61850

Supported Communication modules	PROFIBUS DP	RS-232 C	MB300	INSUM	Drivebus	S100 I/O	Satt I/O	MODBUS TCP	IEC 61850
Master or slave	Master	Master/slave	Master/slave	Master	Master	Master	Master	Master/slave	
Number of channels	2	2	2	1	1 main, 2 aux	1	1	2	1
Max units on CEX bus	12	12	12	6	2	12	4	12	12
Transmission speed	9.6 - 12,000 kbit/s	75 - 19 200 b/s	10 Mbit/s, 200 Datasets/s	10 Mbit/s	4 Mbit/s	-	-	10/100 Mbit/s (Ch1), 10 Mbit/s (Ch2)	10/100 Mbit/s
Cable redundancy	Yes	No	Yes	No	No	No	No	No	No
Module redundancy	Yes	No	No	No	No	No	No	Yes	No
Hot Swap	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Used together with High Integrity Controller	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes
Connectors	DB female (9-pin)	RJ-45 female (8-pin)	RJ-45 female (8-pin)	RJ-45 female (8-pin)	Fiberoptic	Miniribbon (36-pin)	BNC	RJ-45 female (8-pin)	RJ-45 female (8-pin)
24 V current consumption	typ 190 mA	typ 100 mA	typ 150 mA	typ 150 mA	typ 200 mA	typ 200 mA	typ 120 mA	typ 160 mA	typ 160 mA
Protection class	IP20 according to EN60529, IEC 529								
Certification									
CE-marked	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
UL 508	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
UL 60079-15 (Class 1 Zone 2)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RoHS compliance	EN 50581:2012								
WEEE compliance	DIRECTIVE/2012/19/EU								
Dimensions	Width 58 x Height 186 x Depth 135 mm (2.3 x 7.3 x 5.3 in.)								
Weight (including base)	700 g (1.5 lbs)	520 g (1.2 lbs)	700 g (1.5 lbs)	600 g (1.3 lbs)	700 g (1.5 lbs)	600 g (1.3 lbs)	600 g (1.3 lbs)	700 g (1.5 lbs)	700 g (1.5 lbs)

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Supported Communication modules	AF100	PROFINET IO	EtherNet/IP DeviceNet
Module	CI869	CI871/CI871A	CI873/CI873A
Protocol	Advant Fieldbus 100	PROFINET IO	EtherNet/IP DeviceNet (via LD800DN)
Master or slave	Slave	Master	Master
Number of channels	2	1	1
Max units on CEX bus	4	12	4
Transmission speed	Up to 500 Kbit/s	10/100 Mbit/s	10/100 Mbit/s
Cable redundancy	Yes	No	No
Module redundancy	Yes	No	No
Hot Swap	Yes	Yes	Yes
Used together with High Integrity Controller	Yes	Yes	Yes
Connectors	Phoenix (4-pin)	RJ-45 female (8-pin)	RJ-45 female (8-pin)
24 V current consumption	typ 160 mA	typ 160 mA	typ 160 mA
Protection class	IP20 according to EN60529, IEC 529		
UL 508	Yes	Yes	Yes
UL 60079-15 (Class 1 Zone 2)	Yes	Yes	Yes
RoHS compliance	EN 50581:2012		
WEEE compliance	DIRECTIVE/2012/19/EU		
Dimensions	Width 58 x Height 186 x Depth 135 mm (2.3 x 7.3 x 5.3 in.)		
Weight (including base)	700 g (1.5 lbs)	700 g (1.5 lbs)	700 g (1.5 lbs)

For detailed information on each module, please visit: **www.compacthardwareselector.com**

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Communication
Serial Communication Interface

Serial Communication Interface		Article no.	
	RS232-C interfaces for protocols COMLI, MODBUS, Siemens 3964R, the free-programmable serial protocol etc.		
	CI853K01 Dual RS232-C Interface Package including: • CI853, Communication Interface • TP853, Baseplate, width = 60 mm	3BSE018103R1	

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Communication
MODBUS TCP

MODBUS TCP		Article no.	
	CI867K01 Modbus TCP Interface Package including: • CI867, Communication Interface • TP867, Baseplate, width = 60mm	3BSE043660R1	
	• **CI867AK01 Modbus TCP Interface** Package including: • CI867, Communication Interface • TP867, Baseplate, width = 60mm Only compatible with 800xA 6.0.3.3 and 6.1.1, Compact Control Builder 6.0.0-3 and 6.1.1, and onwards	3BSE092689R1	

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Communication
PROFIBUS DP

PROFIBUS DP		Article no.	
	The required PROFIBUS network components (Linking Devices, etc) must be ordered from price list 3BDD013232, PROFIBUS Network Components.		
	CI854BK01 PROFIBUS-DP/V1 Interface Package including: • CI854B, Communication Interface • TP854, Baseplate, width = 60 mm Only compatible with 800xA 6.0.3.2, Compact Control Builder 6.0.0-2 and onwards. Please see Product Update for more information.	3BSE069449R1	

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Communication
PROFINET IO

PROFINET IO		Article no.	
	CI871K01 PROFINET IO Interface Package including: • CI871, Communication Interface • TP867, Baseplate, width = 60 mm	3BSE056767R1	
	CI871AK01 PROFINET IO Interface Package including: • CI871A, Communication Interface • TP867, Baseplate, width = 60 mm Only compatible with 800xA 6.0.3.3 and 6.1.1, Compact Control Builder 6.0.0-3 and 6.1.1, and onwards.	3BSE092693R1	

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Communication
IEC 61850

IEC 61850		Article no.	

	CI868AK01 IEC61850 Interface
	Package including:
	• CI868A, Communication Interface
	• TP867, Baseplate, width=60mm
	  Only compatible with 800xA6.0.3.3 and 6.1.1, Compact
	  Control Builder 6.0.0-3 and 6.1.1, and onwards.
		3BSE092691R1	

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Communication
Ethernet/IP

Ethernet/IP		Article no.	
	CI873AK01 Ethernet/IP Interface Packaging including: • CI873A, Communication Interface • TP867, Baseplate. Width=60mm Only compatible with 800xA 6.0.3.3 and 6.1.1, Compact Control Builder 6.0.0-3 and 6.1.1, and onwards.	3BSE092695R1	
	LD 800DN Linking Device EtherNet/IP to DeviceNet Package including: • 1 pcs LD 800DN • 1 pcs Installation Guide • 2 pcs Termination resistors for DeviceNet, 1/4 W, 121 Ohm. • G1 compliant Only to be used with CI873 Communication Interface.	3BSC690164R1	

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Communication
Advant Fieldbus 100

Advant Fieldbus 100		Article no.	
	CI869K01 AF 100 Interface Package including: • CI869, Communication Interface • TP869, Baseplate, width=60mm Note! This part is exempted from the scope of 2011/65/EU (RoHS) as provided in Article 2(4)(c), (e), (f) and (j) therein (Ref.: 3BSE087241 – Technical Overview - ABB Advant Master Process Control System).	3BSE049110R1	

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Communication
MasterBus 300

MasterBus 300		Article no.	
	CI855K01 MB 300 Interface Package including: • CI855, MB300 Interface Module • TP853, Base plate	3BSE018106R1	

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Communication
S100 I/O Bus

S100 I/O Bus		Article no.	
	CI856K01 S100 I/O Interface Communication between AC 800M and S100 system. Package including: • CI856, Communication Interface • TP856, Baseplate, width = 60mm	3BSE026055R1	

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Communication
Satt I/O

S100 I/O Bus		Article no.	
	CI865K01 SATT I/O Interface Package including: • CI865, Communication Interface TP865, Baseplate, width = 60 mm For SATT 19'' rack I/O and S200 I/O via ControlNet. For additional Satt 19" rack I/O components, please refer to Business Online (BOL)	3BSE040795R1	

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Communication
INSUM

INSUM		Article no.	
	CI857K01 INSUM Ethernet Interface Package including: • CI857, Communication Interface • TP853, Baseplate, width = 60 mm	3BSE018144R1	

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Communication
DriveBus

DriveBus		Article no.	
	CI858K01 DriveBus Interface Package including: • CI858, Communication Interface • TP858, Baseplate, width = 60 mm	3BSE018135R1	

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Communication
Bus Accessories

Bus Accessories		Article no.	
	TK850V007 CEX-Bus Extension Cable Length = 0.7 m Use of TK850V007 needs TK851 as CEX-bus terminator.	3BSC950192R1	
	TB850 CEX-Bus Terminator With 25-pin DB25P male connector. With screw fixing. A TB850 CEX-Bus terminator must always be installed on the last unit on the CEX bus.	3BSC950193R1	
	TB851 CEX-Bus Terminator With 25-pin DB25S female connector. With screw fixing. When Communication Interface units are mounted on adjacent DIN rails, they are connected by means of a CEX-Bus extension cable (TK850) and terminated using a TB851 CEX-Bus terminator.	3BSC950194R1	
	BC810K02 CEX-bus Interconnection Unit Including: • 2 pcs BC810, Interconnection Unit • 2 pcs TP857, Baseplate • TK851, Interconnection Cable • 2 pcs TB850, CEX-Bus Terminator	3BSE031155R1	
	BC820K02 CEX-Bus Interconnection Unit Allows AC 800M redundant PM858, PM862 or PM866(A) pair to be up to 200 m apart, cables not included. Including: • 2 pcs BC820, CEX-Bus Interconnection Unit • 2 pcs TP850 Baseplate • 2 pcs TK857 RCU-Link Cable • 2 pcs TB850, CEX-Bus Terminator	3BSE071500R1	
	TK851V010 Connection Cable Length = 1.0 m. Used as: • RCU Link Cable • BC810 Interconnection Cable	3BSC950262R1	
	TB852 RCU Link Terminator Terminator for RCU Link	3BSC950263R1	
	TB853 RCU Control Link Terminator Terminator for RCU Control Link	3BSE057022R1	
	TK855 RCU Data Link Cable Length = 1.0 m. Used as: RCU Data Link Cable with PM891.	3BSC950356R1	
	TK856 RCU Control Link Cable Length = 1.0 m. Used as: RCU Control Link Cable with PM891.	3BSE057021R1	
	TK857V003 RCU Link Cable Length = 0.3 m. Used with BC820.	3BSC950375R1	

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AC 800M Processor Units
Mounting Rails

Mounting Rails		Article no.	
	Al-profile with DIN rail and Cable Duct, mounting 719 mm (28,3") DIN rail length 683 mm (26,9") For RE820.	3BSE022257R1	
	Al-profile with DIN Rail and Cable Duct, mounting 592 mm (24") DIN rail length 556 mm (21,9")	3BSE022256R1	
	Al-profile with DIN Rail and Cable Duct, mounting 465 mm (19") DIN rail length 429 mm (16,9")	3BSE022255R1	

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Compact Control Builder AC 800M 6.0

Control System Lifecycle Support Program

Control System Lifecycle Support Program
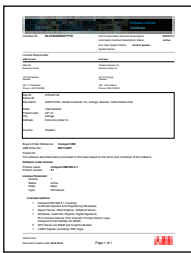
Automation Sentinel is the ABB control system lifecycle management program. An introductory trial period to the Automation Sentinel program will be included, at no additional cost, with each new ABB control system software delivery.

Please contact your designated Automation Sentinel responsible for any questions or please refer to the Automation Sentinel 3.0 product guide for detailed information on the program and on how to calculate and order Automation Sentinel subscriptions.
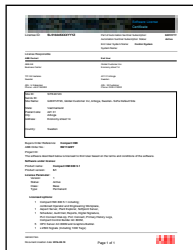
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Control System Lifecycle Support Program
Upgrade Orders

Upgrade Orders		Article no.	
	Compact Control Builder AC 800M 6.0 Media This item can be ordered by users with a valid Automation Sentinel agreement for Compact Control Builder AC 800M or OPC Server for A C 800M. It includes media and documentation for Compact Control Builder AC 800M and OPC server for AC 800M. No license is included.	3BSE046066R60	

Compact Control Builder AC 800M 6.0

Compact Control Builder AC 800M 6.0		Article no.	
	Compact Control Builder AC 800M 6.0 Product Box including: • Licenses for one Compact Control Builder AC 800M, one OPC Server for AC 800M, and one SoftController. • DVD with software for Compact Control Builder AC 800M, OPC Server for AC 800M, and SoftController. • Firmware for AC 800M and its communication units. • Manuals as pdf-files.	3BSE040360R60	
	OPC Server for AC 800M 6.0 License for one OPC Server for AC 800M.	3BSE039915R60	

Control System Lifecycle Support Program	
	Automation Sentinel is the ABB control system lifecycle management program. An introductory trial period to the Automation Sentinel program will be included, at no additional cost, with each new ABB control system software delivery. Please contact your designated Automation Sentinel responsible for any questions or please refer to the Automation Sentinel 3.0 product guide for detailed information on the program and on how to calculate and order Automation Sentinel subscriptions.

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Compact Control Builder AC 800M 6.1

Compact Control Builder AC 800M 6.1		Article no.	
	Compact Control Builder AC 800M 6.1 Media Installation media on a write protected USB media. Includes: - software for Compact Control Builder AC 800M, OPC Server for AC 800M and SoftController - firmware for AC 800M and its communication units - and manuals as pdf-files Media can also be downloaded from ABB Library or My ABB/ My Control System. No license is included.	3BSE093956R1	
	Compact Control builder AC 800M 6.1 License for one Compact Control Builder AC 800M, one OPC Server for AC 800M, and one SoftController.	3BSE093958R1	
	OPC Server for AC 800M 6.1 License for one OPC Server for AC 800M.	3BSE093957R1	

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Extended warranty time on hardware for S800 I/O, S900 I/O, Fieldbus and AC 800M

Extended Warranty

Extended Warranty 12 to 36 month		Article no.	
	Extended Warranty, 12 additional months S800 I/O, S900 I/O, Fieldbus and AC 800M Note that the price for the Extended Warranty Time order will be calculated as 3 percentage of the affected S800 I/O, S900 I/O, Fieldbus and AC 800M articles in the accompanying order.	3BSE049878R1	
	Extended Warranty, 24 additional months S800 I/O, S900 I/O, Fieldbus and AC 800M Note that the price for the Extended Warranty Time order will be calculated as 3 percentage of the affected S800 I/O, S900 I/O, Fieldbus and AC 800M articles in the accompanying order.	3BSE049878R2	
	Extended Warranty, 36 additional months S800 I/O, S900 I/O, Fieldbus and AC 800M Note that the price for the Extended Warranty Time order will be calculated as 3 percentage of the affected S800 I/O, S900 I/O, Fieldbus and AC 800M articles in the accompanying order.	3BSE049878R3	

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Control System Lifecycle Management Program

Automation Sentinel is the ABB control system lifecycle management program for the Extended Automation, Freelance, Compact Product Suite, Symphony Plus and OCS product lines. ABB recommends its customers to use Automation Sentinel for all its installed control systems. With this program, customers can keep control software up-to-date and maintain a flexible path forward to new system software technology. It provides services to maintain and continually advance and enhance your ABB control system installation.

You may choose the level of maintenance and upgrade support that works best for your immediate needs and long-term production targets. Read more about our Automation Sentinel Program and its many valuable services here:
http://new.abb.com/control-systems/service/offerings/service-agreements
Please contact your local sales representative for detailed information on the program and on how order Automation Sentinel subscriptions.

AC 500 Connect License		Article no.	
	AC 500 Connect License for integration of AC 500 PLC with DCS/HMI system via PLC Connect. One license per DCS/HMI system.	3BSE093893R1	

Panel 800 version 6.2

Panel 800 is a user-friendly, intuitive and ergonomic operator panel that combines slim, space saving dimensions with a comprehensive range of advanced functions.

Panel 800 family comprises of user-friendly, intuitive and ergonomic operator panels that combine slim, space-saving dimensions with a comprehensive range of advanced functions.

Adding to the already well established feature rich Panel 800 version 6.2 our new Rugged and Black panels are designed to perform in challenging harsh environments.

Whether it is heavy outdoor use, usage in areas with explosion risk, or ship bridge use in marine applications, they are ready to provide you with the information needed.

Designed to make process automation easy, all panels are equipped with advanced functionality for process and equipment control, maneuvered by touching the LCD display.

Combined with market-leading performance and stunning graphical ability, Panel 800 erodes the line between ordinary Operator Panels and PC- based HMIs.

Panels are configured using ABB's Panel Builder tool that contains a wide range of advanced functions. The functions are tested and developed with customer needs and preferences in focus.

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Specifications Panel 800 version 6.2
Standard panels

Panel	PP875	PP881	PP883	PP886	PP895
Display size	7"	10.4"	12.1"	15.4"	21.5"
Display resolution, ratio	800 × 480 (16:9)	1024 × 600 (16:9)	1280 × 800 (16:10)	1280 x 800 (16:10)	1920 × 1080 (16:9)
Processor	ARM9 (1 GHz)				
Main memory	512 MB	1.0 GB	1.0 GB	1.0 GB	2.0 GB
External storage media	1 × SD card slot (or SDHC with latest image loaded).				
Dimension WxHxD (mm)	204 x 243 x 50	292 × 194 × 52	340 × 242 × 37	410 × 286 × 61	556 × 347 × 65
Net weight (kg)	0.8	1.65	2.6	3.85	7.38
Power supply	+24 VDC (18-32 VDC)				
Operating temperature	-10 to +60 °C				0 °C to +50 °C
Certification					
CE	CE, FCC, KCC				
UL	UL610-2-201				
Marine	DNV, KR, GL, LR, ABS, CCS				-
RoHS compliance	DIRECTIVE/2011/65/EU				
WEEE compliance	DIRECTIVE/2012/19/EU				

For more information about Panel 800 6.2 please visit: **www.compacthardwareselector.com**

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Specifications Panel 800 version 6.2
Black panels

Panel	PP875M	PP875H	PP886M
Display size	7"	7"	15.4"
Display resolution, ratio	800 x 480 (16:9)	800 x 480 (16:9)	1280 x 800 (16:10)
Processor	ARM9 (1 GHz)		
Main memory	512 MB	2 GB	1 GB
External storage media	1 × SD card slot (or SDHC with latest image loaded)		
Dimension WxHxD (mm)	204 × 143 × 50		410 x 286 x 61
Net weight (kg)	0.8	0.8	3.85
Power supply	24 VDC (18-32 VDC)		
Operating temperature	-10 to +60 °C		
Certification			
CE	CE, FCC, KCC		
UL	UL61010-2-201		
Marine	DNV, KR, GL, LR, ABS, CCS		
RoHS compliance	DIRECTIVE/2011/65/EU		
WEEE compliance	DIRECTIVE/2012/19/EU		

For more information about Panel 800 6.2 please visit: **www.compacthardwareselector.com**

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Specifications Panel 800 version 6.2
Rugged panels

Panel	PP886R	PP887H	PP887S
Display size	15.4"		
Display resolution, ratio	1280 x 800 (16:10)		
Processor	ARM9 (800 MHz)	ARM9 (1 GHz)	ARM9 (1 GHz)
Main memory	1 GB		
External storage media	1 × SD card slot (or SDHC with latest image loaded)		
Dimension WxHxD (mm)	410 × 286 × 73		
Net weight (kg)	4.1	4.1	4.8
Power supply	24 VDC (18-32 VDC)		
Operating temperature	-30 to +70 °C		
Certification			
CE	CE, FCC, KCC		
UL	UL-61010-2-201		
Marine	DNV, KR,GL,LR,ABS,CCS		
Hazardous	Ul/cUL C1D2, ATEX (Zone 2, Zone 22), IECEx (Zone 2, Zone 22)		
RoHS compliance	DIRECTIVE/2011/65/EU		
WEEE compliance	DIRECTIVE/2012/19/EU		

For more information about Panel 800 6.2 please visit: **www.compacthardwareselector.com**

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Panel 800 version 6.2
Lifecycle Management Program

Lifecycle Management Program	
	Automation Sentinel is the ABB control system lifecycle management program for the Extended Automation, Freelance, Compact Product Suite, Symphony Plus and OCS product lines. ABB recommends its customers to use Automation Sentinel for all its installed control systems. With this program, customers can keep control software up-to-date and maintain a flexible path forward to new system software technology. It provides services to maintain and continually advance and enhance your ABB control system installation. You may choose the level of maintenance and upgrade support that works best for your immediate needs and long-term production targets. Read more about our Automation Sentinel Program here: **https://new.abb.com/control-systems/service/offerings/service-agreements**

Upgrade Orders		Article no.	
	Panel Builder 800 Version 6, upgrade only Media USB with Panel Builder 800 Version 6 containing the latest version of: • Panel Builder 800 Version 6 • Panel 800 Runtime • Firmware for panels • Manuals as pdf-files • Release Notes • Renewed license This item can be ordered by users with a valid Automation Sentinel agreement for Panel Builder 800.	3BSE069301R1	

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Panel 800 version 6.2

Panel Builder 800

Panel Builder 800		Article no.	
Panel Builder 800 is the engineering tool for Panel 800.	**Panel Builder 800 Version 6.2-0** Media USB with Panel Builder 800 Version 6 containing the latest version of: • Panel Builder 800 Version 6 • Panel 800 Runtime • Firmware for panels • Manuals as pdf-files • Release Notes • License for one Panel Builder 800 Version 6	3BSE069300R1	

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Panel 800 Version 6.2

Operator Panels

Standard Panels		Article no.	
	PP875 Standard panel 7" TFT 800x480 widescreen (16:9). Requires Panel Builder 800 Version 6.2 for configuration. To protect the front, it's recommended to use the RX874 Touch cover. Replaces PP874.	3BSE092977R1	
	PP881 Standard panel 10" TFT 1024x600 widescreen (16:9). Requires Panel Builder 800 Version 6.2 for configuration. To protect the front, it's recommended to use the RX881 Touch cover. Replaces PP877. For mounting in the same cut-out as PP877, RX800 Adapter plate is required.	3BSE092978R1	
	PP883 Standard panel 12" TFT 1280x800 widescreen (16:10). Requires Panel Builder 800 Version 6.2 for configuration. To protect the front, it's recommended to use the RX883 Touch cover. Replaces PP882.	3BSE092979R1	
	PP886 Standard panel 15" TFT 1280x800 widescreen (16:10). Requires Panel Builder 800 Version 6.2 for configuration. To protect the front, it's recommended to use the RX886 Touch cover. Replaces PP885.	3BSE092980R1	
	PP895 Standard panel 21" TFT 1920x1080 widescreen (16:9). Requires Panel Builder 800 Version 6.2 for configuration. To protect the front, it's recommended to use the RX895 Touch cover.	3BSE092981R1	

Black Panels		Article no.	
	PP875M Black Panel 7" TFT 800x480 widescreen (16:9). Requires Panel Builder 800 Version 6.2 for configuration. To protect the front, it's recommended to use the RX874 Touch cover. Replaces PP874M.	3BSE092982R1	
	PP875H Black Panel, High Brightness 7" TFT 800x480 widescreen (16:9) Brightness 1000 cd/m². Requires Panel Builder 800 Version 6.2 for configuration. To protect the front, it's recommended to use the RX874 Touch cover.	3BSE092983R1	
	PP886M Black Panel 15" High Brightness 1000 cd/m² TFT 1280x800 widescreen (16:10). Requires Panel Builder 800 Version 6.2 for configuration. To protect the front, it's recommended to use the RX886 Touch cover. Replaces PP885M.	3BSE092984R1	

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Rugged Panels		Article no.	
	PP886R Rugged Panel 15" TFT 1280x800 widescreen (16:10). Requires Panel Builder 800 Version 6.2 for configuration. To protect the front, it's recommended to use the RX886 Touch cover. Replaces PP885R. One Ethernet port.	3BSE092985R1	
	PP887H Rugged Panel, High Brightness 15" TFT 1280x800 widescreen (16:10) Brightness 1000 cd/m². Requires Panel Builder 800 Version 6.2 for configuration. To protect the front, it's recommended to use the RX886 Touch cover. Replaces PP886H.	3BSE092986R1	
	PP887S Rugged Panel, Sealed 15" TFT 1280x800 widescreen (16:10) Brightness 1000 cd/m². Sealed on all sides, can be mounted directly on an arm. Requires Panel Builder 800 Version 6.2 for configuration. To protect the front, it's recommended to use the RX886 Touch cover. PP887S is a fully sealed version with M12 connectors with IP66 ingress protection rating and ATEX/IECEx Zone 2 and Zone 22 (IP65) certification.	3BSE092987R1	

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Panel 800 Version 6.2
Dongles

Dongles	Article no.	
Requires Panel 800 Runtime Version 6.2 to be installed on the PC. The USB dongle enables the runtime and the amount of signals.		
Panel 800 Version 6.2 dongle 250 tags. USB dongle for 250 signals (tags).	3BSE093564R1	
Panel 800 Version 6.2 dongle 2000 tags. USB dongle for 2000 signals (tags).	3BSE093565R1	
Panel 800 Version 6 dongle 4000 tags. USB dongle for 4000 signals (tags).	3BSE093566R1	

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Panel 800 Version 6.2
Accessories

Communication Interface for Panel 800	Article no.	
CB802 Profibus DP Interface PROFIBUS DP slave expansion module for Panel 800 Version 6 panels. Not possible to use for PP880R, PP885H, PP885M, PP885R, PP886H, PP887H and PP887S. Not marine certified.	3BSE069285R1	
CB810 USB to Ethernet adapter for programming USB to Ethernet adapter with software. Cross over Ethernet patch cable included.	3BSE042255R1	

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Connection Cables for Panel 800	Article no.	
TK858V002 Adapter cable Adapter cable RS232 - RS485 0.2 m 9 pin D-Sub to 25 pin D-Sub. For using version 5 RS422/485 cables on Version 6 panels.	3BSE069474R1	
TK859V000 Gender changer Gender changer 9 pin D-Sub male/male.	3BSE069475R1	
TK860V001 Splitter cable Splitter cable Version 6 panel. Y-split for use with one RS232 and one RS422 connection. Not possible to use with PP887S.	3BSE069476R1	
TK868V002 Splitter 3 way (CAB150) Splitter cable. Used when two serial RS485 connections are needed (1xRS232 + 2xRS485). Not possible to use with PP887S.	3BSE093567R1	
TK865V030 Cable m. 8p to blank 3m (COM) Cable M12 male 8 pin to blank, 3 m (COM). Only for PP887S with M12 contacts.	3BSE092988R1	
TK865V100 Cable m. 8p to blank 10m (COM) Cable M12 male 8 pin to blank, 10 m (COM). Only for PP887S with M12 contacts.	3BSE092989R1	

Connection Cables for Panel 800		Article no.	
	TK866V030 Cable m. 4p to blank 3m (LAN) Cable M12 male 4 pin to blank, 3 m (LAN). Only for PP887S with M12 contacts.	3BSE092990R1	
	TK866V100 Cable m. 4p to blank 10m (LAN) Cable M12 male 4 pin to blank, 10 m (LAN). Only for PP887S with M12 contacts.	3BSE092991R1	
	TK867V030 Cable f. 4p to blank 3m (POW) Cable M12 female 4 pin to blank, 3 m (POWER). Only for PP887S with M12 contacts.	3BSE092992R1	
	TK867V100 Cable f. 4p to blank 10m (POW) Cable M12 female 4 pin to blank, 10 m (POWER). Only for PP887S with M12 contacts.	3BSE092993R1	
	TK865V000 Conn. 8p male 5.5-7.5mm (COM) Connector M12 male 8 pin 5.5 - 7.5 mm, Gland (COM) Only for PP887S with M12 contacts.	3BSE092994R1	
	TK866V000 Conn. 4p male 5.5-7.5mm (LAN) Connector M12 male 4 pin 5.5 - 7.5 mm, Gland (LAN) Only for PP887S with M12 contacts.	3BSE092995R1	
	TK867V000 Conn. 4p fem. 5.5-7.5mm (POW) Connector M12 female 4 pin 5.5 - 7.5 mm, Gland (POWER) Only for PP887S with M12 contacts.	3BSE092996R1	

Front Protections		Article no.	
	RX874 Touch cover 7" Plastic cover for protection. Possible to use for PP880R, PP874, PP874M, PP875, PP875M and PP875H.	3BSE069287R1	
	RX881 Touch cover 10" Plastic cover for protection. Possible to use for PP881.	3BSE093559R1	
	RX883 Touch cover 12" Plastic cover for protection. Possible to use for PP883.	3BSE093560R1	
	RX886 Touch cover 15" Plastic cover for protection. Possible to use for PP886, PP886M, PP886R, PP887H and PP887S.	3BSE093561R1	
	RX895 Touch cover 21" Plastic cover for protection. Possible to use for PP895.	3BSE093562R1	

Adapter Plates		Article no.	
	RX800 Adapter plate for PP877 to PP881 Adapter plate for installing the replacement panel PP881 on a PP877 mounting.	3BSE093563R1	

Miscellaneous		Article no.	
	MB802V2 SD card 2GB Secure Digital memory card 2GB Industrial grade for Version 6 panels.	3BSE069477R1	

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S800 I/O Modules

S800 I/O is a comprehensive and modular process I/O system that communicates with parent controllers either direct connected using the Modulebus or over industry-standard field buses. Thanks to its broad connectivity it fits a wide range of process controllers from ABB and others.

By permitting installation in the field, close to sensors and actuators, S800 I/O reduces the installation cost by reducing the cost of cabling. And thanks to features such as hot swap of modules, on-line reconfiguration and redundancy options, it contributes to keeping production – and thereby profits up.

Through the FCI (Field communication Interfaces) different methods for connecting the S800 IO family to a controller are available: Modulebus, Profibus DP and Ethernet.

S800 I/O features include:
• Comprehensive coverage
• Flexible configuration and installation
• Ease of set up
• Reliability and accuracy
• HART pass-through
• Redundancy also on I/O module level
• High accuracy time tagging
• Defined outputs at communication errors
• I/O modules with Intrinsic Safety interfaces

With its cost-effective design and just 59 mm depth installation, S800L I/O modules are the perfect choice for PLC applications. Robust mechanics, one-piece handling, easy mounting and smart connections save your time in all phases of installation. The comprehensive S800 I/O system consists of more than 40 different module types to respond to every need. Classification of corrosive protection, electrical safety, hazardous location and marine certification brings the possibility to install S800 I/O in a wide variety of applications. S800 I/O is installed with more than 30 million channels worldwide.

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S800 I/O
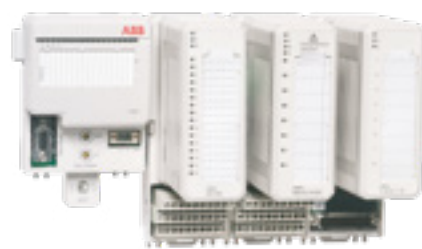
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S800 I/O

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S800L I/O

S800 I/O Modules

Digital input modules	
DI810	16 channels, 2 groups of 8 channels, 24 V d.c., current sink.
DI811	16 channels, 2 groups of 8 channels, 48 V d.c., current sink.
DI814	16 channels, 2 groups of 8 channels, 24 V d.c., current source.
DI818	32 channels, 2 groups of 16 channels, 24 V d.c., current sink.
DI820	8 channels, separate returns, 110 V d.c., 120 V a.c.
DI821	8 channels, separate returns, 220 V d.c., 230 V a.c.
DI825	With time tagging, 8 channels, separate returns, 125 V d.c.
DI828	16 channels, separate returns, 110 V d.c., 120 V a.c / d.c.
DI830	With time tagging. 16 channels, 2 groups of 8 channels, 24 V d.c., current sink. Resolution: < 0.5 ms.
DI831	With time tagging. 16 channels, 2 groups of 8 channels, 48 V d.c., current sink. Resolution: < 0.5 ms.

Pulse input module	
DP820	2 channels, separate returns, 0.25 Hz - 1.5 MHz, signal voltage: 5 / 12 V d.c.
DP840	8 channels, extended diagnostics, wire-fault detection, current limited sensor supply, 0.5-20 kHz, 12/24 V d.c or NAMUR, common return.

Digital output modules	
DO810	16 channels, 2 groups of 8 channels, 24 V d.c., max 0.5 A d.c., transistor, current source, short-circuit-proof.
DO814	16 channels, 2 groups of 8 channels, 24 V d.c., max 0.5 A, transistor, current sink, short-circuit-proof.
DO815	8 channels, 2 groups of 4 channels, 24 V d.c., max 2 A, transistor, current source, short-circuit-proof, wire-fault detection.
DO818	32 channels, 2 groups of 16 channels, 24 V, max 0.5 A d.c., transistor, current source, short-circuit-proof
DO820	8 channels, separate returns, 5-250 V, max 3 A a.c./d.c., relay (N.O.).
DO821	8 channels, separate returns, 5-250 V, max 3 A a.c./d.c., relay (N.C.).
DO828	16 channels, separate returns, 5-250V a.c. / 5-125V d.c. max 2A a.c./d.c., relay (N.O.).

Analog input modules	
AI810	8 channels, single-ended, 0(4)-20 mA, 0(2)-10 V, 12 bits.
AI815	8 channels with HART. 0(4)..20 mA, 0(1)..5 V, 12 bit, single ended, current limited transmitter supply.
AI820	Differential inputs, 4 channels, 0(1)-5 V, ±0(2)-10 V, ±0(4)-20 mA, 14 bits + sign.
AI825	Individually galvanically isolated channels, 4 channels, ±0(2)-10 V, ±0(4)- 20 mA, 14 bits + sign.
AI830A	RTD inputs, 8 channels, Pt100, Ni100, Ni120, Cu10, resistor 0-400 ohms, 14 bits, 3-wire.
AI835A	TC inputs, 8 channels, (7+ ref. junction), separate returns. TC types B, C, D, E, J, K, L, N, R, S, T, U, - 30...75 mV, 15 bits.

Analog output modules	
AO810V2	8 channels, common return, 0(4)-20 mA, 14 bits, load: 850 ohms (short-circuit-proof).
AO815	8 channels with HART. 4..20 mA, 12 bit, load: 750 ohms, common return, short-circuit-proof.
AO820	4 channels, individually galvanically isolated, separate returns, measuring range: ±0(2)-10 V, ±0(4)-20 mA, resolution: 12 bits + sign, load: 500 ohms (current) / 5 kohms (voltage), short-circuit-proof.

Intrinsic-safety modules	
DI890	8 channels, separate returns, proximity sensors (NAMUR) or voltage-free contact., current sink, wire-fault detection.
DO890	4 channels, separate returns, load 150-5000 ohms, 11 V @ 40 mA, current source, wire-fault detection, short circuit-proof.
AI890	8 channels, single-ended, 0(4)-20 mA, 12 bits, transmitter power supply.
AI893	8 channels, TC: 7 + ref. junction, sep. returns. TC types B, C, E, J, K, L, N, R, S, T, U, -10...80 mV. RTD: Pt50-1000, Ni100-500, Cu10-100, resistor 0-4000 W, 3-wire. 15 bits + sign.
AI895	8 channels, single-ended, 4-20 mA, 12 bits, transmitter power supply, HART pass-through.
AO890	8 channels, common return, 0(4)-20 mA, 12 bits, load: 725 ohms short-circuit-proof.
AO895	8 channels, common return, 4-20 mA, 12 bits, load: 725 ohms short-circuit-proof, HART pass-through.

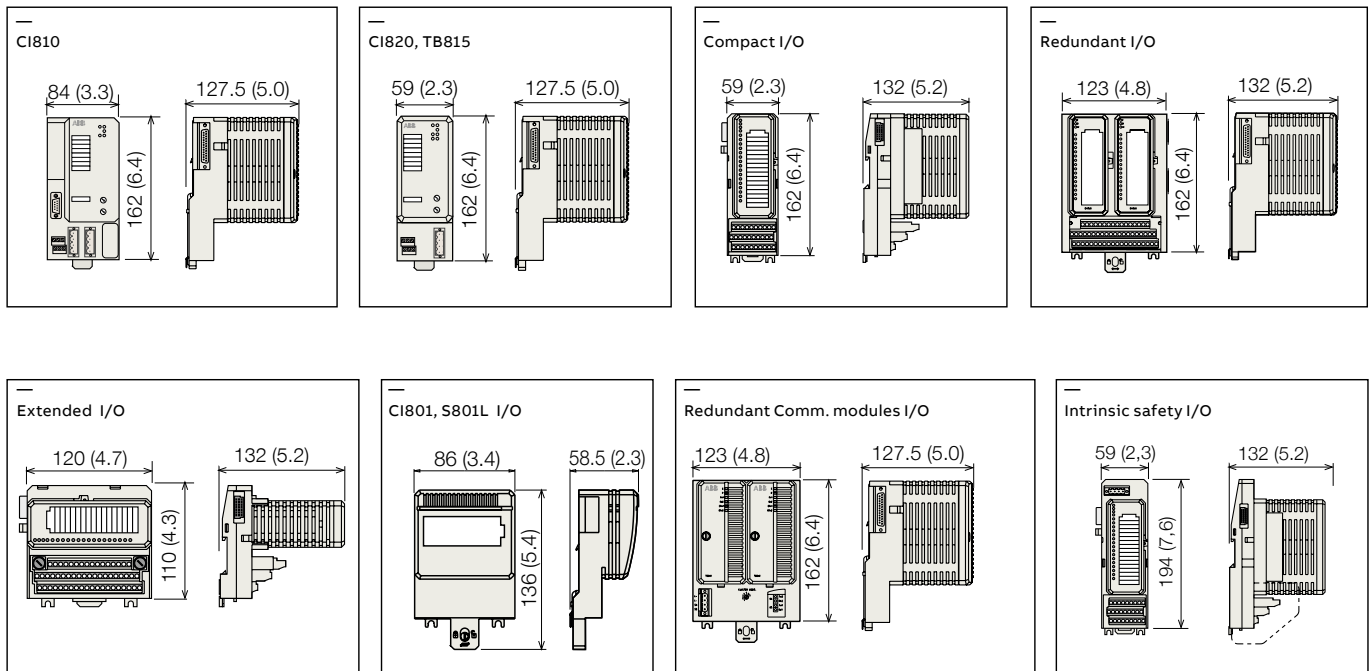| Redundant modules	
DI840	16 channels, common return, 24 V d.c., current sink, extended diagnostics, time-tagging, current limited sensor supply.
DP840	8 channels, common return, 0.5-20 kHz, 12/24 V d.c or NAMUR, extended diagnostics, wire-fault detection.
DO840	16 channels, common return, 24 V d.c., max. 0,5 A, transistor, current source, short-circuit-proof, extended diagnostics.
AI843	TC input, 8 channels + ref. junction. TC types: B, C, E, J, K, L, N, R, S, T, U, -30...75 mV, 16 bits, extended diagnostics.
AI845	8 channels, 12 bits, 0(4)-20 mA 0(1)-5 V, extended diagnostics, HART pass-through, current limited transmitter supply, single ended.
AO845A	8 channels, 12 bits, common return, 4-20 mA, extended diagnostics, HART pass-through, 750 ohms.

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S800L I/O Modules

S800L modules	
DI801	16 channels, 1 group, 24 V d.c., current sink.
DI802	8 channels, 110 V d.c., 150 V a.c.
DI803	8 channels, 220 V d.c., 230 V a.c.
DO801	16 channels, common return, 24 V, max 0.5 A d.c., transistor, current source, short-circuit-proof.
DO802	8 channels, 5-250 V, max 2 A a.c./d.c., relay (N.O.).
AI801	8 channels, single-ended, 0(4)-20 mA, 12 bits.
AO801	8 channels, common return, 0(4)-20 mA, 12 bits, load: less than 750 ohms.
Accessories	
TU805K01	For DI801 & DO801. With field power distribution screw terminals. For two or three wire connection.

Environmental Data for S800 I/O	
Climatic Operating Conditions	+5 to +55 °C (Storage -40 to +70 °C, RH = 5 to 95 % no condensation, IEC/EN 61131-2
Protection class	IP20 according to EN 60529, IEC 529
Corrosive protection	G3 compliant according to ISA-71.04
Electromagnetic Compatibility and CE-mark	Meets EMC directive 2004/108/EC according to EN 61000-6-2 and EN 61000-6-4
Electromagnetic Emission	Tested according to EN 61000-6-4 EMC – Generic Emission Standard, Part 2 – Industrial Environment
Electromagnetic Immunity	Tested according to EN 61000-6-2 EMC – Generic Immunity Standard, Part 2 – Industrial Environment
Electrical Safety [x]	UL508, IEC/EN 61131-2
Hazardous Classified Locations [x]	C1 Div 2 cULus, C1 Zone 2 cULus, ATEX Zone 2
RoHS compliance	EN 50581:2012
WEEE compliance	DIRECTIVE/2012/19/EU

[x] For detailed information on each module, please visit: www.compacthardwareselector.com

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Measurements

Dimensions in mm (in.)

S800 I/O modules selection guide

	NAMUR inputs	Binary 24 V	Binary 48 V	Binary 110 V	Binary 230 V	Binary Relay	Analog Unipolar	Analog Bipolar	Temperature RTD	Temperature T/C	SOE	HART	Intrinsic safety	Redundant
I/O Features S800														
Digital input modules														
DI810		•												
DI811			•											
DI814		•												
DI818		•												
DI820				•										
DI821					•									
DI825				•							•			
DI828				•										
DI830		•									•			
DI831			•								•			
DI840		•									•			•
DI890	•												•	
Digital output modules														
DO810		•												
DO814		•												
DO815		•												
DO818		•												
DO820						•								
DO821						•								
DO828						•								
DO840		•												•
DO890													•	
Pulse input modules														
DP820		•												
DP840	•	•												•
Analog input modules														
AI810							•							
AI815							•					•		
AI820								•						
AI825								•						
AI830A									•					
AI835A										•				
AI843										•				•
AI845							•					•		•
AI890							•						•	
AI893									•	•			•	
AI895							•					•	•	
Analog output modules														
AO810V2							•							
AO815							•					•		
AO820								•						
AO845A							•					•		•
AO890							•						•	
AO895							•					•	•	
S800L modules														
DI801		•												
DI802			•											
DI803				•										
DO801		•												
DO802						•								
AI801							•							
AO801							•							

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S800 I/O
Communication interfaces

Feature	CI801	CI840A	CI845	TC810
Article number	3BSE022366R1	3BSE041882R1	3BSE075853R1	3BSE076220R1
Function	PROFIBUS-DPV1 fieldbus communication interface. Supervisory functions of I/O ModuleBus. Isolated power supply to I/O modules. OSP handling and configuration. Input power fused. Hot Configuration In Run. HART pass-through.	PROFIBUS-DPV1 fieldbus communication interface. Supervisory functions of I/O ModuleBus. Isolated power supply to I/O modules. OSP handling and configuration. Input power fused. Power supply supervision. Hot Configuration In Run. HART pass-through.	Ethernet fieldbus communication interface. Supervisory functions of I/O ModuleBus. Isolated power supply to I/O modules. OSP handling and configuration. Single/redundant 24V power supply with built-in voting and power supply supervision. Hot Configuration In Run. HART pass-through and Sequence of Events. Use as single or redundant, together with TC810 and TU860.	Ethernet Adapter for copper media with built in 2-port switch. Hosts two RJ45 ports. Use as single or redundant, together with CI845 and TU860.
Redundant	No	Yes	Yes	Yes
Power Input	24 V d.c. (19.2 - 30)	24 V d.c. (19.2 - 30)	24 V d.c. (19.2 - 30)	24 V d.c. (19.2 - 30)
Power Input Fuse	2 AF	2 AF	2 AF	2 AF
Power Consumption at 24 V d.c.	140 mA	190 mA	150 mA	60 mA
Power Supply Monitoring Inputs	N/A	Max. input voltage: 30 V Min. input voltage for high level: 15 V Max. input voltage for low level: 8 V		
Power Dissipation	5.4 W	7.7 W	5 W	1.1 W
Maximum Ambient Temperature	55°C (131°F) Horizontal mounted 40°C (104°F) Vertical mounted	55°C (131°F) Horizontal mounted 40°C (104°F) Vertical mounted	-40°C (-40°F) to +70°C (158°F)	-40°C (-40°F) to +70°C (158°F)
Electrical ModuleBus	Maximum of 12 I/O modules	Maximum of 12 single I/O modules or 6 pairs of redundant I/O modules	Maximum of 12 single I/O modules or 12 pairs of redundant I/O modules	N/A
Optical ModuleBus	Maximum of 7 I/O clusters via TB842	Maximum of 7 I/O clusters via TB842	N/A	N/A
Max optical cable length	N/A	N/A	N/A	N/A
Power Output - ModuleBus	24 V max. = 1.5 A fused [(1)]. 5 V max. = 1.5 A current lim.	24 V max. = 1.5 A current lim. 5 V max. = 1.5 A current lim.	24 V max. = 2x 1.5 A current lim. 5 V max. = 2x 1.5 A current lim.	N/A
Module termination units	N/A	TU846 or TU847	TU860 or TU865	TU860 or TU865
MTU Keying code	N/A	AA	A	A
Dielectric test voltage	500 V a.c.	500 V a.c.	500 V a.c.	500 V a.c.
Rated insulation voltage	50 V	50 V	50 V	50 V
Width	85.8 mm (3.38 in.)	54 mm (2.13 in.)	33 mm (1.18 in.)	110 mm (4.33 in.)
Depth	58.5 mm (2.30 in.)	96 mm (3.78 in.)	121.7 mm (4.79 in.)	76.3 mm (3.0 in.)
Height	136 mm (5.35 in.)	119 mm (4.69 in.)	135 mm (5.31 in.)	24.5 mm (0.96 in.)
Weight	300 g (0.66 lbs.)	200 g (0.44 lbs.)	225 g (0.49 lbs.)	105 g (0.23 lbs.)
Climatic operating conditions	0 to +55 °C (Storage -25 to +70 °C), RH=5 to 95 % no condensation, IEC/EN 61131-2 [(2)]		-40 to +70 °C (Storage -40 to +85 °C), RH=5 to 95 % no condensation, IEC/EN 61131-2	
Certificates and standards [(3)]	CE mark: Yes Electrical safety: IEC 61131-2, UL 508 Hazardous Location: C1 Div 2 cULus, C1 Zone 2 cULus, ATEX Zone 2[(*)] Marine certification: ABS, BV, DNV-GL, LR (*) Corrosive atmosphere ISA-S71.04: G3 Pollution degree: Degree 2, IEC 60664-1 Mechanical operating conditions: IEC/EN 61131-2 EMC: EN 61000-6-4 and EN 61000-6-2 Overvoltage categories: IEC/EN 60664-1, EN 50178 Equipment class: Class I according to IEC 61140; (earth protected) RoHS compliance: DIRECTIVE/2011/65/EU (EN 50581:2012) WEEE compliance: DIRECTIVE/2012/19/EU			

(1) Fuse type: Subminiature fuse 3.15 A
   • LT-5 Fast-Acting 622 series according to Littelfuse
   • TR5-F Fuse-link No. 370 according to Wickmann
   • MSF 250 according to Schurter
(2) 0 to +40 °C compact MTUs on vertical DIN-rail. Approvals are issued for +5 to +55 °C.
(3) For detailed information on each module, please visit: **www.800xahardwareselector.com**
(*)Pending for CI845/TC810

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S800 I/O
Extended warranty for S800 I/O Hardware

Extended warranty for S800 I/O Hardware	
	We can offer an extended warranty for one, two, or three years in addition to normal warranty conditions for S800 I/O Hardware. See price list Extended Warranty 3BSE049908.

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S800 I/O
ISA-S71.04 level G3 Compliance

ISA-S71.04 level G3 Compliance	
	Modules are compliant to ISA-S71.04 level G3, unless explicitly stated differently.

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Communication
Field Communication Interface

Field Communication Interface		Article no.	
	CI801 ProfiBus FCI S800 Communication Including: • 1 pce Power Supply Connector • 1 pce TB807 Modulebus Terminator The basic system software loaded in CI801 does not support the following I/O modules: DI825, DI830, DI831, DI885, AI880A, DI880 and DO880.	3BSE022366R1	
	CI801 Engineering kit SW 1.3 Including: • 1 pce CD with GSD file, Memory Maps and Release Note. • 1 pce Reference Manual Memory Maps for CI801.	3BSE038540R1300	
	CI840A Profibus DP-V1 Interface For redundant communication interface two CI840A, and one TU847 or one TU846 must be ordered.	3BSE041882R1	
	CI840 Engineering kit SW 4.0 Including: • 1 CD with GSD file, Memory Maps and Release Notes. • 1 Reference Manual, Memory Maps for CI840.	3BSE031694R4000	
	CI845 EthernetFCI module Ethernet Fieldbus Communication Interface Module for connection of S800 I/O or Select I/O to Ethernet. For redundant configuration two Fieldbus Communication Interfaces CI845, two Ethernet Adapters TC810 and one TU860 or one TU865 are needed.	3BSE075853R1	
	TU846 MTU for CI840 For 1+1 CI840 Supporting redundant I/O. Vertical mounting of modules. Including: • 1 pcs Power Supply Connector • 2 pcs TB807 Modulebus Terminator	3BSE022460R1	
	TU847 MTU for CI840 For 1+1 CI840 Supporting non-redundant I/O. Vertical mounting of modules. Supporting non-redundant I/O. Including: • 1 pcs Power Supply Connector • 1 pcs TB807 Modulebus Terminator	3BSE022462R1	

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Communication
Field Communication Interface

Field Communication Interface		Article no.	
	TU860 MTU for Ethernet FCI and S800 Ethernet Fieldbus Communication Interface Module Termination Unit for connection of single or redundant S800 I/O. Supports single or redundant Ethernet Fieldbus Communication Interface Module and single or redundant Ethernet Adapter. Mounting on vertical DIN-rail. Including: - 1 pcs TL814K01 Empty slot protector HI Module - 2 pcs TB807 Modulebus Terminator	3BSE078710R1	
	TC810 Ethernet Adapter for Ethernet FCI Ethernet Adapter for copper media with built in 2-port switch. Hosts two RJ45 ports. Use as single or redundant.	3BSE076220R1	
	TS810K01 Screw Lugs Screw lugs for TU860/TU865 and TUS810. 100 units.	3BSE090351R1	
	TL810K01 Empty slot protector for FCI Empty slot protector for a Fieldbus Communication Interface slot on the Ethernet FCI Module Termination Unit. 10 pieces per package.	3BSE088170R1	
	TL811K01 Empty slot protector for EA Empty slot protector for a Ethernet Adapter slot on the Ethernet FCI MTU. 10 pieces per package.	3BSE088171R1	

Field Communication Interface		Article no.	
	Extra, Front label set FCI Sheet with 12 labels. For TB820	3BSC970089R1	
	Extra, Label set, item design. FCI Sheet with 40 labels. For TB820	3BSC970091R1	
	Mounting kit, vertical CI801/CI840/TN840 For vertical mounting of CI801, CI840, and TB840 on a vertical DIN rail.	3BSE040749R1	
	Mounting profile kit DIN rails and duct DIN rail length: 1650 mm + 210mm (65") + (8.3")	3BSE049768R1	
	Al-profile with DIN Rail, Cable Duct, 19" Mounting 465 mm (19") DIN rail length 429 mm (16,9")	3BSE022255R1	
	Al-profile with DIN Rail, Cable Duct, 24" **Mounting 592 mm (24")** DIN rail length 556 mm (21,9")	3BSE022256R1	

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Communication
Upgrade Kit and Tool Cables

Upgrade Kit and Tool Cables		Article no.	
	TK212A Tool cable RJ45 8P8C plug Used to connect a PC to CI801, CI840 or CI840A for download of software. Download to CI801 requires a TK527V030 in addition. RJ45 (male) to Dsub-9 (female), length 3 m. RJ45 8P8C plug (with shell). Cable : UL2464 26 AWG x 8C.	3BSC630197R1	
	FS801K01 Service adapter kit Including: • 1 pcs Service adapter FS801 • 1 pcs cable TK802 For connection of CI801 to PC a cable TK212A, is also needed.	3BSE038407R1	

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S800 I/O
S800 I/O Modules

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Analog Input Modules		Article no.	
	AI810 Analog input 8 ch. 0(4)..20mA, 0..10V, 12Bit, single ended. Use Module Termination Unit TU810, TU812, TU814, TU818, TU830, TU833, TU835, TU838, TU850.	3BSE008516R1	
	AI815 Analog Input HART 8 ch. 0(4)..20mA, 0(1)..5V, 12bit, single ended. Current limited transmitter power distribution. Use Module Termination Unit TU810, TU812, TU814, TU818, TU830, TU833, TU835, TU838.	3BSE052604R1	
	AI820 Analog input 4 ch. +-20mA, 0(4)...20mA, +-10V, +-5V, 0(1)...5V, diff., 50V CMV,. Rin(curr)250 Ohms, 14bit + sign. Individually galvanic isolated channels. Use Module Termination Unit TU810, TU812, TU814, TU830, TU833.	3BSE008544R1	
	AI825 Analog Input 4 ch. -20..20mA, -10..10V, 14bit + sign. Individually galvanic isolated channels. Use Module Termination Unit TU811, TU813, TU831.	3BSE036456R1	
	AI830A Analog input RTD 8 ch. Pt100, Ni100/120, Cu10, R. Use Module Termination Unit TU810, TU812, TU814, TU830, TU833.	3BSE040662R1	
	AI835A Thermocouple/mV Input 8 ch. Use Module Termination Unit TU810, TU812, TU814, TU818, TU830, TU833.	3BSE051306R1	
	AI843 Termocouple/mV Input S/R 8 ch. Single or redundant. 16bit. Use Module Termination Unit TU818, TU830, TU833, TU842, TU843, TU852.	3BSE028925R1	

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S800 I/O
S800 I/O Modules

Analog Input Modules		Article no.	
	AI845 Analog Input S/R HART 8 ch. 0(4)..20mA, 0(1)..5V, 12bit, single ended. Current limited transmitter power distribution. Advanced on-board diagnostics. HART support. Use Module Termination Unit TU810, TU812, TU814, TU818, TU830, TU833, TU835, TU838, TU844, TU845, TU854.	3BSE023675R1	
	AI890 Analog Input IS 8 ch. 0 (4)...20mA single ended. Intrinsic Safety Interface. Use Module Termination Unit TU890 or TU891.	3BSC690071R1	
	AI893 Analog Input TC/RTD IS 8 ch. For TC and RTD sensors. Intrinsic Safety Interface. Use Module Termination Unit TU890 or TU891.	3BSC690141R1	
	AI895 Analog Input IS HART 8 ch. 4...20mA single ended. Intrinsic Safety Interface and HART. Use Module Termination Unit TU890 or TU891.	3BSC690086R1	

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S800 I/O
S800 I/O Modules

Analog Output Modules		Article no.	
	AO810V2 Analog Output 8 ch. 0(4)..20mA, 14bit RLmax 500/850 Ohms. Use module Termination Unit TU810, TU812, TU814, TU830 or TU833.	3BSE038415R1	
	AO815 Analog Output HART 8 ch. 1x8 ch. 4..20mA, 12bit, RLmax 750 ohm. Use Module Termination Unit TU810, TU812, TU814, TU830 or TU833.	3BSE052605R1	
	AO820 Analog Output 4 ch. +-20mA, 0(4)...20mA, +-10V, 12bit+sign. Individually galvanic isol. channels. RL max 500 Ohms. Use Module Termination Unit TU810, TU812, TU814, TU830, TU833.	3BSE008546R1	
	AO845A Analog Output S/R HART 8 ch. (0) 4..20mA, 12bit, RLmax 750 ohm. Single or redundant. Loop supervised DI function. Use Module Termination Unit TU810, TU812, TU814, TU830, TU833, TU842, TU843, TU852.	3BSE045584R1	
	AO890 Analog Output IS 8 ch. 0 (4)...20mA. RL max 750 ohm.Intrinsic Safety Interface. Use Module Termination Unit TU890 or TU891.	3BSC690072R1	
	AO895 Analog Output IS HART 8 ch. 0(4)...20mA. RL max 750 ohm. Intrinsic Safety Interface and HART. Use Module Termination Unit TU890 or TU891.	3BSC690087R1	

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S800 I/O
S800 I/O Modules

Digital Input Modules		Article no.	
	DI810 Digital Input 24V 16 ch. Isoltated in two groups of 8 channels. Use Module Termination Unit TU810, TU812, TU814, TU818, TU830, TU833, TU838, TU850.	3BSE008508R1	
	DI811 Digital input 48V 16 ch. Isolated in two groups of 8 channels. Use Module Termination Unit TU810, TU812, TU814, TU818, TU830, TU833, TU838, TU850.	3BSE008552R1	
	DI814 Digital Input 24V Current 16 ch. Isolated in two groups of 8 channels. Current sourcing. Use Module Termination Unit TU810, TU812, TU814, TU830, TU833, TU838.	3BUR001454R1	
	DI818 Digital Input 24V 32 ch. Isolated in two groups of 16 channels. Use Module Termination Unit TU818, TU819, TU830.	3BSE069052R1	
	DI820 Digital Input 120V a.c. 8 ch. Individually galvanic isolated channels. Use Module Termination Unit TU811, TU813, TU831, TU839, TU851.	3BSE008512R1	
	DI821 Digital Input 230V 8 ch. Individually galvanic isolated channels. Use Module Termination Unit TU811, TU813, TU831, TU839, TU851.	3BSE008550R1	
	DI825 Digital Input 125V SOE 8 ch. Individually Isolated channels. Use Module Termination Unit TU811, TU813, TU831.	3BSE036373R1	
	DI828 Digital Input, 120V 16 ch. Individually galvanic isolated channels. Use Module Termination Unit TU851.	3BSE069054R1	
	DI830 Digital Input 24V SOE 16 ch. Isolated in two groups of 8 channels. Use Module Termination Unit TU810, TU812, TU814, TU818, TU830, TU833, TU838, TU850.	3BSE013210R1	
	DI831 Digital Input 48V SOE 16 ch. Isolated in two groups of 8 channels. Use Module Termination Unit TU810, TU812, TU814, TU818, TU830, TU833, TU838, TU850.	3BSE013212R1	
	DI840 Digital Input 24V S/R 16 ch. Single or redundant. Advanced On-Board diagnostics. Use Module Termination Unit TU810, TU812, TU814, TU818, TU830, TU833, TU838, TU842, TU843, TU852.	3BSE020836R1	
	DI890 Digital Input IS 8 ch. Intrinsic Safety Interface. Individually galvanic isolated. Use Module Termination Unit TU890 or TU891.	3BSC690073R1	

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S800 I/O
S800 I/O Modules

Digital Output Modules		Article no.	
	DO810 Digital Output 24 V 16 ch. Isolated in two groups of 8 channels. 0.5A, Short circuit proof. Use Module Termination Unit TU810, TU812, TU814, TU830, TU833.	3BSE008510R1	
	DO814 Digital Output Current 16 ch. Isolated in two groups of 8 channels. 0,5A , shortcut circuit proof. Current sinking. Use Module Termination Unit TU810, TU812, TU814, TU830, TU833, TU838.	3BUR001455R1	
	DO815 Digital Output 24V 8 ch. Isolated in two groups of 4 channels. 2.0A short circuit proof. Use Module Termination Unit TU810, TU812, TU814, TU830, TU833.	3BSE013258R1	
	DO818 Digital Output 24V 32 ch. Isolated in two groups of 16 channels. 0.5A, Short circuit proof. Use Module Termination Unit TU818, TU819, TU830.	3BSE069053R1	
	DO820 Digital Output Relay 8 ch. 24-230V a.c../d.c. 3A, cos phi>0.4, d.c. 42W. Individually galvanic isolated channels. Use Module Termination Unit TU811, TU813, TU831, TU836, TU837, TU851.	3BSE008514R1	
	DO821 Digital Output Relay 8 ch. 24-230V a.c./d.c.. 3A, cos phi>0.4, d.c. 42W, normal closed. Individually galvanic isolated channels. Use Module Termination Unit TU811, TU813, TU831, TU836, TU837, TU851.	3BSE013250R1	
	DO828 Digital Output 16 ch. Individually galvanic isolated channels. 5-250V a.c and 5-125V d.c, max 2A. Use Module Termination Unit TU851.	3BSE069055R1	
	DO840 Digital Output 24V S/R 16 ch. solated in two groups of 8 channels. Single or redundant. 0.5A. Advanced On-board diagnostics. Use Module Termination Unit TU810, TU812, TU814, TU830, TU833, TU842, TU843, TU852.	3BSE020838R1	
	DO890 Digital Output IS 4 ch. Intrinsic Safety Interface. Individually galvanic isolated channels. Use Module Termination Unit TU890 or TU891.	3BSC690074R1	

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S800 I/O
Pulse Counting Modules

Pulse Counting Modules		Article no.	
	DP820 Pulse Counter RS-422 2 ch bidirectional pulse counters and frequency measurement, current, 5V, (12v), 24V. 1,5MHz Rated isol 50V Use Module Termination Unit TU810, TU812, TU814, TU830, TU833.	3BSE013228R1	
	DP840 Pulse Counter S/R 8 ch. Pulse Counter or Frequency Measurement Module. Redundant or single. 0.5Hz - 20kHz. Use Module Termination Unit TU810, TU812, TU814, TU818, TU830, TU833, TU842, TU843, TU844, TU845, TU852, TU854.	3BSE028926R1	

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S800 I/O
Label sets for I/O Modules

Label sets for I/O Modules		Article no.	
	Transparent film fronts Set of 12 transparent plastic film fronts. To be used with ordinary paper quality.	3BSE072159R1	
	White colored plastic coated paper One sheet of size A4. Original paper quality. No need to use transparent films.	3BSE072160R1	

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S800 I/O
Communication interfaces - TB and TUs

Feature	TB820V2	TB825	TB826	TB840A	TB842
Article number	3BSE013208R1	3BSE036634R1	3BSE061637R1	3BSE037760R1	3BSE022464R1
Function	2 fiber optic ports to optical ModuleBus ModuleBus (electrical) to the I/O Modules Supervisory functions of I/O ModuleBus and power supply Isolated power supply to I/O modules Input power fused.	ModuleBus optical media converter from plastic or HCS fibre with versatile link connector to glass fibre with ST connector. Allows distribution of the optical ModuleBus up to 1000 m per cluster in star configurations.	ModuleBus optical media converter from plastic or HCS fibre with versatile link connector to glass fibre with SC connector. Allows distribution of the optical ModuleBus up to 5000 m per cluster in star configurations.	2 fiber optic ports to optical ModuleBus ModuleBus (electrical) to the I/O Modules Supervisory functions of I/O ModuleBus and power supply Isolated power supply to I/O modules Input power fused.	Communication interface between the CI801 or CI840/CI840A FCI and the TB820/TB820V2/TB840/ TB840A ModuleBus Modem of an I/O cluster or ABB drives units via the Optical ModuleBus. TB842 connects to CI801 via TB806 and to CI840/CI840A via TU847 and TB806 for single I/O or via TU846 and TB846 for redundant I/O.
Redundant	No	No	No	Yes	Yes
Power Input	24 V d.c. (19.2 - 30)	24 V d.c. (19.2 - 30)	24 V d.c. (19.2 - 30)	24 V d.c. (19.2 - 30)	N/A
Power Input Fuse	2 AF	2 AF	2 AF	2 AF	
Power Consumption at 24 V d.c.	100 mA	96 mA	96 mA	120 mA	20 mA
Power Supply Monitoring	Max. input voltage: 30 V Min. input voltage for high level: 15 V Max. input voltage for low level: 8 V	N/A	N/A	Max. input voltage: 30 V Min. input voltage for high level: 15 V Max. input voltage for low level: 8 V	N/A
Power Dissipation	6 W	2.3 W	2.3 W	6 W	0.5 W
Maximum Ambient Temperature	55°C (131°F) Horizontal mounted 40°C (104°F) Vertical mounted	55°C (131°F) Horizontal mounted 40°C (104°F) Vertical mounted	55°C (131°F) Horizontal mounted 40°C (104°F) Vertical mounted	55°C (131°F) Horizontal mounted 40°C (104°F) Vertical mounted	55° C (131° F) horizontal mounted. 40° C (104° F) vertical mounted
Electrical ModuleBus	Maximum of 12 I/O modules	N/A	N/A	Maximum of 12 single I/O modules or 6 pairs of redundant I/O modules	N/A
Optical ModuleBus	Maximum of 7 I/O clusters, Wavelength 650 nm	Local optical ModuleBus 1 and 2 with versatile link contacts, plastic or HCS. Field optical ModuleBus with ST bayonet contacts.	Local optical ModuleBus 1 and 2 with versatile link contacts, plastic or HCS. Field optical ModuleBus with SC contacts.	Maximum of 7 I/O clusters, Wavelength 650 nm.	Fiber optic interface, one transmit and one receive connection for max. 10 Mbit/s. Wavelength 650 nm
Max optical cable length	Local cable: Plastic Optical Fiber (POF): Max 15 m. Hard Clad Silica (HCS): Max 200 m.	Local cable: Plastic Optical Fiber (POF): Max 15 m. Hard Clad Silica (HCS): Max 200 m. Field cable: Glass Optical fiber, multimode, 62.5/125 µm: Max 1 000 m. Glass Optical fiber, multimode, 50/125 µm: Max 100 m.	Local cable: Plastic Optical Fiber (POF): Max 15 m. Hard Clad Silica (HCS): Max 200 m. Field cable: Glass Optical fiber, single mode, 9/125 µm: Max 5 000 m.	Local cable: Plastic Optical Fiber (POF): Max 15 m. Hard Clad Silica (HCS): Max 200 m.	The module is equipped with Transmitter/Receiver for up to 10 Mbit/s. Both plastic and HCS (Hard Clad Silica) optic fiber with connectors (Agilent's, former Hewlett-Packard, Versatile Link) can be used with the TB842.
Power Output - ModuleBus	24 V max. = 1.4 A 5 V max. = 1.5 A	N/A	N/A	24 V max. = 1.4 A 5 V max. = 1.5 A	
Module termination units	N/A	N/A	N/A	TU807, TU840, TU841, TU847, TU848 or TU849	TB806, TU846 and TU847
MTU Keying code	N/A	N/A	N/A	AB	N/A
Dielectric test voltage	500 V a.c.	500 V a.c.	500 V a.c.	500 V a.c.	N/A
Rated insulation voltage	50 V	50 V	50 V	50 V	N/A

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Feature	TB820V2	TB825	TB826	TB840A	TB842
Width	58 mm (2.39 in.)	85.6 mm (3.37 in.)	85.6 mm (3.37 in.)	54 mm (2.13 in.)	17.6 mm (0.69 in.)
Depth	122 mm (4.8 in.)	58.5 mm (2.30 in.)	58.5 mm (2.30 in.)	96 mm (3.78 in.)	42.3 mm (1.67 in.)
Height	170 mm (6.7 in.)	136 mm (5.35 in.)	136 mm (5.35 in.)	119 mm (4.69 in.)	56.7 mm (2.23 in.)
Weight	300 g (0.66 lbs.)	210 g (0.46 lbs.)	210 g (0.46 lbs.)	200 g (0.44 lbs.)	90g (0.20 lbs.)
Climatic operating conditions	0 to +55 °C (Storage -25 to +70 °C), RH=5 to 95 % no condensation, IEC/EN 61131-2 [2]				
Certificates and standards [3]	CE mark: Yes Electrical safety: IEC 61131-2, UL 508 Hazardous Location: C1 Div 2 cULus, C1 Zone 2 cULus, ATEX Zone 2 Marine certification: ABS, BV, DNV-GL, LR (*) Corrosive atmosphere ISA-S71.04: G3 Pollution degree: Degree 2, IEC 60664-1			Mechanical operating conditions: IEC/EN 61131-2 EMC: EN 61000-6-4 and EN 61000-6-2 Overvoltage categories: IEC/EN 60664-1, EN 50178 Equipment class: Class I according to IEC 61140; (Earth protected) RoHS compliance: EN 50581:2012 WEEE compliance: DIRECTIVE/2012/19/EU	

(2) 0 +40 °C compact MTUs on vertical DIN-rail. Approvals are issued for +5 to +55 °C.
(3) For detailed information on each module, please visit: **www.compacthardwareselector.com**
(*) No Marine cert. for TB826

Feature	TU807	TU840	TU841	TU846
Article number	3BSE039025R1	3BSE020846R1	3BSE020848R11	3BSE022460R1
Function	Module termination unit (MTU) for single configuration of Optical ModuleBus Modem TB840/TB840A. The MTU is a passive unit having connections for power supply, a single electrical ModuleBus, one TB840/TB840A and a rotary switch for cluster address (1 to 7) setting.	Module termination unit (MTU) for redundant configuration of Optical ModuleBus Modem TB840/TB840A. The MTU is a passive unit having connections for power supply, double electrical ModuleBus, two TB840/TB840A and a rotary switch for cluster address (1 to 7) setting.	Module termination unit (MTU) for redundant configuration of Optical ModuleBus Modem TB840/TB840A, for use with non-redundant I/O. The MTU is a passive unit having connections for power supply, a single electrical ModuleBus, two TB840/TB840A and a rotary switch for cluster address (1 to 7) setting.	Module termination unit (MTU) for redundant configuration of the field communication interface CI840/CI840A and redundant I/O. The MTU is a passive unit having connections for power supply, two electrical ModuleBuses, two CI840/CI840A and two rotary switches for station address (0 to 99) settings.
Cable redundancy	No	No	No	No
Module redundancy	No	Yes	Yes	Yes
Type	Single TB810/TB840A, Single I/O, Single Power	Redundant TB840/TB840A, Redundant I/O, Single Power	Redundant TB840/TB840A, Single I/O, Single Power	Redundant CI840/CI840A, Redundant I/O
Power Input	24 V d.c. (19.2 - 30 V)	24 V d.c (19.2 -30 V)	24 V d.c (19.2 - 30 V)	24 V d.c (19.2 - 30 V)
Hot Swap	No	No	No	No
Mounting	Vertical or Horizontal			
Power Consumption at 24 V d.c.	N/A	N/A	N/A	N/A
Connector	N/A	N/A	N/A	PROFIBUS: DSUB9 connector Service ports: RJ45 connector
Acceptable wire sizes	Solid: 0.2 - 2.5 mm² Stranded: 0.2 - 2.5 mm², 24 - 12 AWG Recommended torque: 0.5 Nm	Solid: 0.2 - 2.5 mm² Stranded: 0.2 -2.5 mm², 24 -12 AWG Recomended torque: 0.5 Nm	Solid: 0.2 - 2.5 mm² Stranded: 0.2 -2.5 mm², 24 -12 AWG Recomended torque: 0.5 Nm	Solid: 0.2 - 2.5 mm² Stranded: 0.2 -2.5 mm², 24 -12 AWG Recomended torque: 0.5 Nm
Dielectric test voltage	500 V a.c.	500 V a.c	500 V a.c	500 V a.c
Rated insulation voltage	50 V	50 V	50 V	50 V
Power Dissipation	N/A	N/A	N/A	N/A
Width	59 mm (1.57 in.)	124 mm (4.88 in.)	124 mm (4.88 in.)	124 mm (4.88 in.)
Depth	47 mm (1.85 in.)	47 mm (1.85 in.)	47 mm (1.85 in.)	47 mm (1.85 in.)
Height	186.5 mm (7.34 in.)	186.5 mm (7.34 in.)	186.5 mm (7.34 in.)	186.5 mm (7.34 in.)
Weight	450 g (0.99 lbs.)	450 g (0.99 lbs.)	450 g (0.99 lbs.)	500 g (1.1 lbs.)
Climatic operating conditions	0 to +55 °C (Storage -25 to +70 °C), RH=5 to 95 % no condensation, IEC/EN 61131-2 [2]			
Certificates and standards [3]				
Equipment class	Class I according to IEC 60536; (earth protected)	Class 1 according to IEC 60536; (earth protected)	Class 1 according to IEC 60536; (earth protected)	Class 1 according to IEC 60536; (earth protected)
Protection rating	IP20 according to IEC 60529	IP20 according to IEC 60529	IP20 according to IEC 60529	IP20 according to IEC 60529
CE- marking	Yes			
Electrical Safety	cULus	cULus	cULus	cULus
Hazardous location	cULus Hazardous Location Class 1 Zone 2, ATEX Zone 2	cULus Hazardous Location Class 1 Zone 2, ATEX Zone 2	cULus Hazardous Location Class 1 Zone 2, ATEX Zone 2	cULus Hazardous Location Class 1 Zone 2, ATEX Zone 2
Marine certificates	N/A	ABS, BV, DNV-GL, LR	ABS, BV, DNV-GL, LR	N/A
RoHS compliance	DIRECTIVE/2011/65/EU (EN 50581:2012)			
WEEE compliance	DIRECTIVE/2012/19/EU			

(3) For detailed information on each module, please visit: **www.compacthardwareselector.com**

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Feature	TU847	TU848	TU849	TU860
Article number	3BSE022462R1	3BSE042558R1	3BSE042560R1	3BSE078710R1
Function	Module termination unit (MTU) for redundant configuration of the field communication interface CI840/CI840A. The MTU is a passive unit having connections for power supply, electrical ModuleBus, two CI840/CI840A and two rotary switches for station address (0 to 99) settings. A ModuleBus Optical Port TB842 can be connected to TU847 via TB806.	Module termination unit (MTU) for redundant configuration of Optical ModuleBus Modem TB840/TB840A. The MTU is a passive unit having connections for two power supply (one for each modem), double electrical ModuleBus, two TB840/TB840A and a rotary switch for cluster address (1 to 7) setting.	Module termination unit (MTU) for redundant configuration of Optical ModuleBus Modem TB840/TB840A. The MTU is a passive unit having connections for two power supply, one for each modem, a single electrical ModuleBus, two TB840/TB840A and a rotary switch for cluster address (1 to 7) setting.	Module termination unit (MTU) only for connecting S800 I/O modules to the Modulebus connector. Two mounting slots for redundant CI845 Ethernet FCI modules. Two mounting slots for redundant Ethernet Adapters. Not intended for functional safety applications. Intended for vertical mounting. Also suitable for installation in hazardous areas classified as Zone 2 or Class I, Division 2.
Cable redundancy	No	Yes	Yes	
Module redundancy	Yes	Yes	Yes	
Type	Redundant CI840/CI840A, Single I/O	Redundant TB840/TB840A, Redundant I/O, Dual Power	Redundant TB840/TB840A, Single I/O, Dual Power	Redundant MTU for CI845, TC810 and S800 I/O Modules
Power Input	24 V d.c (19.2 - 30 V)	24 V d.c (19.2 -30 V)	24 V d.c (19.2 -30 V)	24 V d.c (19.2 -30 V)
Hot Swap	No	No	No	No
Mounting	Vertical or Horizontal			Vertical mounting
Power Consumption at 24 V d.c.	N/A	N/A	N/A	N/A
Connector	PROFIBUS: DSUB9 connector Service ports: RJ45 connector	N/A	N/A	Maximum 2 FCI modules. Maximum 2 Ethernet Adapters. Inlet and connector for I/O cluster.
Acceptable wire sizes	Solid: 0.2 - 2.5 mm^2 Stranded: 0.2 -2.5 mm^2, 24 -12 AWG Recomended torque: 0.5 Nm	Solid: 0.2 - 2.5 mm^2 Stranded: 0.2 -2.5 mm^2, 24 -12 AWG Recomended torque: 0.5 Nm	Solid: 0.2 - 2.5 mm^2 Stranded: 0.2 -2.5 mm^2, 24 -12 AWG Recomended torque: 0.5 Nm	
Dielectric test voltage	500 V a.c	500 V a.c	500 V a.c	
Rated insulation voltage	50 V	50 V	50 V	
Power Dissipation	N/A	N/A	N/A	N/A
Width	124 mm (4.88 in.)	124 mm (4.88 in.)	124 mm (4.88 in.)	135 mm (5.31 in.)
Depth	47 mm (1.85 in.)	47 mm (1.85 in.)	47 mm (1.85 in.)	95.5 mm (3.76 in.)
Height	186.5 mm (7.34 in.)	186.5 mm (7.34 in.)	186.5 mm (7.34 in.)	210 mm (8.26 in.)
Weight	500 g (1.1 lbs.)	450 g (0.99 lbs.)	450 g (0.99 lbs.)	500 g (1.1 lbs.)
Climatic operating conditions	0 to +55 °C (Storage -25 to +70 °C), RH=5 to 95 % no condensation, IEC/EN 61131-2 [2]			-40°C (-40°F) to +70°C (158°F) (Storage -40°C (-40°F) to +85°C (185°F)) RH=5 to 95 % no condensation
Certificates and standards [3]				
Equipment class	Class 1 according to IEC 60536; (earth protected)	Class 1 according to IEC 60536; (earth protected)	Class 1 according to IEC 60536; (earth protected)	
Protection rating	IP20 according to IEC 60529	IP20 according to IEC 60529	IP20 according to IEC 60529	IP20 according to IEC 60529
CE- marking	Yes			
Electrical Safety	cULus	cULus	cULus	IEC/EN 61010-1, IEC 61010-2-201, UL 61010-2-201, CSA C22.2 No. 61010-2-201
Hazardous location	cULus Hazardous Location Class 1 Zone 2, ATEX Zone 2	cULus Hazardous Location Class 1 Zone 2, ATEX Zone 2	cULus Hazardous Location Class 1 Zone 2, ATEX Zone 2	EN 60079-0, EN60079-7, EN60079-15, UL 12.12.01/CSA C22.2 No. 213-17
Marine certificates	ABS, BV, DNV-GL, LR	ABS, BV, DNV-GL, LR	ABS, BV, DNV-GL, LR	–
RoHS compliance	DIRECTIVE/2011/65/EU (EN 50581:2012)			
WEEE compliance	DIRECTIVE/2012/19/EU			

(3) For detailed information on each module, please visit: **www.compacthardwareselector.com**

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S800 I/O
Module Termination Units

Module Termination Units		Article no.	
	TU805K01 Termination Units 2- or 3-wire Includes 10 pcs of Termination Unit TU805 for DI801 and DO801.	3BSE035990R1	
	TU810V1 Compact MTU, 50V. Compact Module Termination Unit 2x8 signal terminals.	3BSE013230R1	
	TU811V1 Compact MTU 250V. Compact Module Termination Unit 1x8 signal terminals.	3BSE013231R1	
	TU812V1 Compact MTU, 50V, D-sub. Compact Module Termination Unit with 25 pin D-sub connector, rated isol. 50V. D-sub (female) connector is not enclosed.	3BSE013232R1	
	TU813 Compact MTU, 250V. Crimped snap-in connectors.	3BSE036714R1	
	TU814V1 Compact MTU, 50V, snap-in con. Compact Module Termination Unit 2x8 Signal terminals for crimped snap-in connectors. Detachable (pluggable) connectors are enclosed.	3BSE013233R1	
	TU818 Compact MTU, 50V. Compact Module Terminatin Unit with 1x32 (and 2x16) signal terminals.	3BSE069209R1	
	TU819 Compact MTU, 50V. Compact Module Termination Unit with 2x25 pin D-sub connector, D-sub (female) connector is not enclosed.	3BSE068891R1	
	TU830V1 Extended MTU, 50V. Extended Module Termination Unit 2x16 signal terminals.	3BSE013234R1	
	TU831V1 Extended MTU, 250V. Extended Module Termination Unit 2x8 signal terminals.	3BSE013235R1	
	TU833 Extended MTU, 50V. 2x16 signal terminals, Spring-cage terminals.	3BSE038726R1	
	TU835V1 Extended MTU, 50V, Fused. Extended Module TErmination Unit. 8 fused power outlets, 8 signal terminals.	3BSE013236R1	
	TU836V1 Extended MTU, 250V, Fused. Extended Module Termination Unit 2x4 fused signals, 2x4 return terminals, 2x2 L 2x2N terminals.	3BSE013237R1	
	TU837V1 Extended MTU, 250V, Fused. Extended Module Termination Unit 8x1 fused isol. signals, 8x1 L terminals, 2x6 N terminals.	3BSE013238R1	
	TU838 Extended MTU, 50V. Extended Module Termination Unit 2x4 fused transducer power outlets, 16 signal terminals, 2x4 return terminals, 2x2 L+, 2x2 L- terminals. Module is mounted horizontally.	3BSE008572R1	
	TU839 Extended MTU, 250V. Extended Module Termination Unit, 2x8 signal terminals 2x4 fused sensor power.	3BSE046966R1	
	TU842 Redundant MTU, 50V. Used with redundant I/O. Horizontal DIN rail mounting.	3BSE020850R1	
	TU843 Redundant MTU, 50V. Used with redundant I/O. Vertical DIN rail mounting.	3BSE021443R1	

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S800 I/O and S800L I/O
Module Termination Units

Module Termination Units		Article no.	
	TU844 Redundant MTU, 50V. Used with redundant I/O. Horizontal DIN rail mounting. Shunt Sticks not included.	3BSE021445R1	
	TU845 Redundant MTU, 50V. Used with redundant I/O. Vertical DIN rail mounting. Shunt Sticks not included.	3BSE021447R1	
	TU850 Extended MTU, 50V. 2x8 signal terminals and 2x8 disconnetable current limited sensor/transmitter outlet power terminals.	3BSE050930R1	
	TU851 Extended MTU, 250V. Extended Module Termination Unit with 2x16 signal terminals.	3BSE068782R1	
	TU852 MTU, Redundant, 50V. Used with redundant I/O. Horizontal DIN rail mounting. With 2x25 pin D-sub connector.	3BSE069964R1	
	TU854 MTU, Redundant, 50V. Used with redundant I/O. Horizontal DIN rail mounting. With 1x25 pin D-sub connector. Shunt Stick not included.	3BSE069966R1	
	TU890 Intrinsic Safety MTU Module Termination Unit with Intrinsic Safety Interface, 3x9 signal terminals. Including wiring separator.	3BSC690075R1	
	TU891 non-IS MTU Module Termination Unit for 3x9 signal terminals. For non Intrinsic Safety.	3BSC840157R1	
	TY801K01 8 pcs Shunt Sticks 125 + 125 ohms shunt. Used for AI845 and AI880A on TU834, TU844, TU845, TU854.	3BSE023607R1	
	TY804K01 8 pcs Shunt Sticks 1000 ohms shunt. Used for DP840 on TU844, TU845, TU854	3BSE033670R1	
	TY805K01 8 pcs Shunt Sticks 125 + 125 ohms shunt with current limitation on transmitter power. Used for AI845 and AI880A on TU834, TU844, TU845, TU854.	3BSE081160R1	
	TY820K01 10 pcs Temperature Sensor TY820 is a temperature sensor with a PT 100 element. Used with AI835/AI835A and AI843 to measure cold junction Temperature.	3BSE056980R1	

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S800L I/O
S800L I/O Modules

Analog Input Modules		Article no.	
	AI801 Analog input 8 ch. 0(4)..20mA, 12bit, single ended.	3BSE020512R1	

Analog Output Modules		Article no.	
	AO801 Analog output 8 ch. 0(4)…20mA, 12 bit, RLmax 850 Ohm.	3BSE020514R1	

Digital Input Modules		Article no.	
	DI801 Digital Input 24V 16 ch. Current sink.	3BSE020508R1	
	DI802 Digital Input 120V 8 ch. Induvidually galvanic isolated channels	3BSE022360R1	
	DI803 Digital Input 230V 8 ch. Induvidually galvanic isolated channels	3BSE022362R1	

Digital Output Modules		Article no.	
	DO801 Digital Output 24V 16 ch. 0.5A Short circuit proof.	3BSE020510R1	
	DO802 Digital Output Relay 8 ch Induvidually galvanic isolated channels.	3BSE022364R1	

S800L I/O
Label sets for S800L I/O Modules

Label sets for S800L I/O Modules		Article no.	
	Label Set S800L, 16 ch Text colour: Black, Text style: Helv. reg., Text height: 2mm, Material: Polyesterfilm Xeroperm t=0,12. Sheet with 12 labels for 16 channels I/O modules.	3BSE019419R1	
	Label Set S800L, 8 ch Text colour: Black , Text style: Helv. reg., Text height: 2mm, Material: Polyesterfilm Xeroperm t=0,12. Sheet with 12 labels for 8 channels I/O modules.	3BSE019419R2	
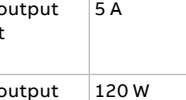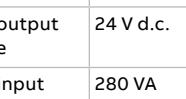
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S800 I/O and S800L I/O
ModuleBus Communication Parts

ModuleBus Communication Parts	Article no.	
TB805 Bus Outlet Modulebus extension cable adaptor D-sub 25, female. One requried per extension cable TK801.	3BSE008534R1	
TB845, Dual Modulebus outlet Modulebus extension cable adaptor two D-sub, female. Two TK801 cables for redundancy.	3BSE021437R1	
TB806 Bus Inlet Modulebus extension cable adaptor D-sub 25, male. One requried per extension cable TK801.	3BSE008536R1	
TB846, Dual Modulebus inlet Modulebus extension cable adaptor two D-sub, male. Two TK801 cables for redundancy.	3BSE021439R1	
TK801V003 Cable, 0.3 m Modulebus Extension Shielded Cable 0.3m D-sub 25, male-female.	3BSC950089R1	
TK801V006 Cable, 0.6 m Modulebus Extension Shielded Cable 0.6m D-sub 25, male-female.	3BSC950089R2	
TK801V012 Cable, 1.2 m Modulebus Extension Shielded Cable 1.2m D-sub 25, male-female.	3BSC950089R3	
TB807 Modulebus terminator Terminator for Modulebus	3BSE008538R1	
TB820V2 Modulebus Cluster Modem Optical cluster modem for non redundant operation. Including: 1 pce Power Supply Connector 1 pce TB807 Modulebus Terminator	3BSE013208R1	
TB825 Optical Media Converter Multi Mode Short to long distance optical fiber conversion. For modulebus communication up to 1000 m.	3BSE036634R1	
TB826 Optical Media Converter Single Mode Short to long distance optical fiber conversion. For modulebus communication up to 5000 m, for S800 I/O HI up to 20000 m.	3BSE061637R1	
TB840A Modulebus Cluster Modem Optical cluster modem for 1+1 redundant operation.	3BSE037760R1	
TB842 Modulebus Optical Port Used together with CI801 and CI840, connected via TB806 or TB846.	3BSE022464R1	
TU807 Termination Unit for TB840/TB840A For single modulebus I/O. Including: 1 pcs TB807	3BSE039025R1	
TU840 Termination Unit for 1+1 TB840 Support for redundant I/O Including: 1 pce Power Supply Connector 2 pcs TB807 Modulebus Terminator	3BSE020846R1	
TU841 Termination unit for 1+1 TB840 Support for non-redundant I/O. Including: 1 pce Power Supply Connector 1 pce TB807 Modulebus Terminator	3BSE020848R1	

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S800 I/O and S800L I/O
ModuleBus Communication Parts

ModuleBus Communication Parts		Article no.	
	TU848 Termination Unit for 1+1 TB840 MTU with individual power supply. Support for redundant I/O. Including: - 1 pcs Power Supply Connector - 2 pcs TB807 Modulebus Terminator	3BSE042558R1	
	TU849 Termination Unit for 1+1 TB840. MTU with individual power supply. Support for non-redundant I/O. Including: - 1 pcs Power Supply Connector - 1 pcs TB807 Modulebus Terminator	3BSE042560R1	
	TK811V015 POF Cable, 1.5m, Duplex L = 1.5 m latching duplex connector Duplex plastic fibre	3BSC950107R1	
	TK811V050 POF Cable, 5m, Duplex L = 5 m latching duplex connector Duplex plastic fibre	3BSC950107R2	
	TK811V150 POF Cable, 15m, Duplex L = 15 m latching duplex connector Duplex plastic fibre	3BSC950107R3	
	TK812V015 POF Cable, 1.5m, Simplex L = 1.5 m latching connector Simplex plastic fibre	3BSC950118R1	
	TK812V050 POF Cable, 5m, Simplex L = 5 m latching connector Simplex plastic fibre	3BSC950118R2	
	TK812V150 POF Cable, 15m, Simplex L = 15 m latching connector Simplex plastic fibre	3BSC950118R3	

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AC 800M Power supply and Voters selection guide

Feature	SD822Z	SD831	SD832	SD833	SD834	SS822Z	SS832	SS823	SD853	SD854
Rated output current	5 A	3 A	5 A	10 A	20 A	20 A	10 A (20 A in parallell operation)	20 A	10 A	20 A
Rated output power	120 W	72 W	120 W	240 W	480 W	-	-	-	240 W	480 W
Rated output voltage	24 V d.c.	24 V d.c.	24 V d.c.	24 V d.c.	24 V d.c.	-	-	-	24 V d.c.	24 V d.c.
Rated input power	280 VA 135 W	134/143 VA	240/283 VA	447/514 VA	547/568 VA	500 W	240 W (480 W in parallell operation)	500 W		
Mains/input voltage, nominal	115/230 V a.c. 225-250 V d.c.	100-240 V a.c. 110-300 V d.c.	100-120 V a.c. 200-240 V a.c. Auto-select input	100-120 V a.c. 200-240 V a.c. Auto-select input	100-240 V a.c. 110-150 V d.c	2x24 V d.c.	2x24 V d.c (1x24 V d.c in parallell operation)	1x24 V d.c	100-240 V a.c. 110-150 V d.c.	100-240 V a.c. 110-150 V d.c.
Mains voltage variation allowed	85 - 110%	90-264 V a.c. 88-375 V d.c.	90-132 V a.c. 180-264 V a.c.	90-132 V a.c. 180-264 V a.c.	85-276 V a.c. 88-375 V d.c.	-	-	-	85-264 V a.c 88-180 V d.c.	85-264 V a.c. / 88-180 V d.c.
Primary peak inrush current at power on	Typ 15 A	< 28/< 54 A	< 10 A	< 10 A	< 13 A	-	-	-	6 A / 9 A peak	10 A / 4.5 A peak
Applications	SELV and PELV	SELV and PELV	SELV and PELV	SELV and PELV	SELV and PELV	-	-	-	SELV and PELV	SELV and PELV
Load sharing	Two in parallell	-	-	-	Parallell connection	Two in parallell	Two in parallell	Yes	-	Parallell connection
Power Factor (at rated output power)		0.61/0.56	0.56/0.47	0.59/0.51	0.95/0.90	-	-	-	0.99/0.97	0.99/0.95
Heat dissipation	13 W	10/8 W	14/13 W	24/22 W	40/32 W	10 W at 20 A and 2,5 W at 5 A	9 W (18 W)	24 W at 20 A and 6 W at 5 A	16.4 W / 12.1 W, 120/230 V a.c.	29.6/22.1 W, 120/230 V a.c.
Efficiency factor (%)	88	88/89.8	89.4/90.2	91/91.6	92.4/93.9	-	-	-	93.6/95.2	94.2/95.6

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AC 800M Power supply and Voters selection guide

Feature	SD822Z	SD831	SD832	SD833	SD834	SS822Z	SS832	SS823	SD853	SD854
Output voltage regulation	+- 2%	< 50 mV / < 100 mV	< 70 mV / < 100 mV s	< 70 mV / < 100 mV	< 10 mV / < 100 mV	0,5 V lower than input	0.85 V lower than input	1.2 V lower than input	< 50 mV	< 100 mV
Ripple (peak to peak)	< 50 mV	< 100 mV	< 50 mV	< 50 mV	< 100 mV	-	-	-	< 50 mV	50 mV
Secondary voltage holdup time at mains blackout	> 20 ms	29/120 ms	80/78 ms	46/47 ms	32/51 ms	-	-	-	37 ms	32 ms
Maximum output current (min)	10 A	3.3 A	6 A At ambient temp < 45 °C	12 A At ambient temp < 45 °C	30 A < 4 s	35 A (Overload)	25 A (Overload)	35 A Overload)	12 A At ambient temp < 45 °C	24 A At ambient temp < 45 °C
Maximum ambient temperature	60 °C	60 °C	60 °C	60 °C	60 °C	60 °C	60 °C	55 °C	70 °C	70 °C
Primary: Recommended external fuse [1]	10 A	10-20 A	10-20 A	10-20 A	10-20 A	-	-	-	10-20 A	10-20 A
Secondary: Short circuit	< 10 A	< 8 A	< 14 A	< 18 A	< 40 A	-	-	-	30 A for < 12 ms	60 A for < 12 ms
Secondary: Over-Voltage protection	29 V	< 39 V	< 39 V	< 39 V	< 37 V	-	-	< 30 V	Max 32 V	Max 32 V
Class of protection	I PE (Protective Earth) connection required					-	-	-	I PE (Protective Earth) connection required	
Protection rating	IP20 according to IEC60529									
Width	65 mm (2.56 in.)	32 mm (1.26 in.)	32 mm (1.26 in.)	60 mm (2.36 in.)	82 mm (3.23 in.)	50 mm (1.97 in.)	32 mm (1.26 in.)	116 mm (4.6 in.)	39 mm (1.53 in.)	48 mm (1.88 in.)
Depth	110 mm (4.3 in.)	102 mm (4.02 in.)	117 mm (4.61 in.)	117 mm (4.61 in.)	127 mm (5.0 in.)	110 mm (4.3 in.)	117 mm (4.61 in.)	145 mm (5.8 in.) including connector	117 mm (4.60 in.)	127 mm (5.00 in.)
Height	125 mm (4.9 in.)	124 mm (4.88 in.)	124 mm (4.88 in.)	124 mm (4.88 in.)	124 mm (4.88 in.)	125 mm (4.9 in.)	125 mm (4.9 in.)	132 mm (5.3 in.)	124 mm (4.88 in.)	124 mm (4.88 in.)
Mounting spacing Width mm	15 mm (0.59 in.)	15 mm (0.59 in.)	15 mm (0.59 in.)	15 mm (0.59 in.)	15 mm (0.59 in.)	15 mm (0.59 in.)	15 mm (0.59 in.)	15 mm (0.6 in.)	15 mm (0.59 in.)	15 mm (0.59 in.)
Mounting spacing Height mm	25 mm (1 in.)	40 mm (1.57 in.)	40 mm (1.57 in.)	40 mm (1.57 in.)	40 mm (1.57 in.)	25 mm (1 in.)	25 mm (1 in.)	25 mm (1.2 in.)	40 mm (1.57 in.)	40 mm (1.57 in.)
Weight (lbs.)	620 g (1.4 lbs)	430 g (0.9 lbs.)	500 g (1.1 lbs.)	700 g (1.5 lbs.)	1200 g (2.6 lbs.)	630 g (1.4 lbs)	350 g (0.77 lbs.)	870 g (1.9 lbs.)	600 g (1.32 lbs)	830 g (1.83 lbs)
Corrosive atmosphere ISA-S71.04	G3	G2	G2	G2	G2	G3	G2	G3	G3	G3
CE mark	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
El. safety, Haz loc, C1 Zone 2	No	No	No	No	No	No	No	No	Yes	Yes
El. safety, Haz loc, C1 Div 2	No	No	No	No	Yes	No	No	No	Yes	No
Electrical safety	IEC 61131-2, UL 508, EN 50178 (Note! UL 508 not valid for SS823)								IEC 60950-1	
Pollution degree	Degree 2, IEC 60664-1									
Mechanical operating conditions	EN 61131-2									
EMC	EN 61000-6-4 and EN 61000-6-2									
Over voltage Categories [2]	Over-voltage Category III (IEC/EN 60664-1)									
RoHS compliance	DIRECTIVE/2011/65/EU (EN 50581:2012)									
WEEE compliance	DIRECTIVE/2012/19/EU									

[1] Microcircuit Breaker (MCB), Characteristic B
[2] For detailed information on each module, please visit: **www.compacthardwareselector.com**

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S800 I/O
Power Supply

Power Supply		Article no.	
	SD822Z Power Supply, 5A IInput 115/230V a.c. switch selectable, output 24V d.c., 5A. If redundant power application is required connect to SS822Z Voting Unit. DIN rail mounted.	3BSC610054R1	
	SS822Z Power Voting Unit With dual 24V d.c 20A inputs, single 24V d.c. 20A output. Each power input supervised. Used if redundant power supply is required. For use with power supply SD822Z. DIN rail mounted.	3BSC610055R1	
	SD831 Power Supply, 3 A Input a.c. 100-240 V or d.c. 110-300 V. Output d.c. 24 V 3A. If redundant power application is required connect to SS8XX voting unit. DIN rail mounted. G2 compliant.	3BSC610064R1	
	SD832 Power Supply, 5A Input a.c. 100-120/200-240 V. Output d.c. 24 V 5A, auto-select input. If redundant power application is required connect to SD8XX voting unit. DIN rail mounted. G2 compliant.	3BSC610065R1	
	SD833 Power Supply, 10A Input a.c. 100-120/200-240 V, auto-select input. Output d.c. 24V 10A. If redundant power application is required connect to SD8XX voting unit. DIN rail mounted. G2 compliant.	3BSC610066R1	
	SD834 Power Supply, 20A Input a.c. 100-240 V or d.c. 110-300 V. Output d.c. 24 V 20A. If redundant power application is required connect to SS8XX voting unit. DIN rail mounted. G2 compliant.	3BSC610067R1	
	SD853 Power Supply, 10A 10A Power Supply Module. Input AC 100-240V. Input DC 110-150V. Output DC 24-28V. Mounting on horizontal DIN rail. Width 39mm.	3BSE088188R1	
	SD854 Power Supply, 20A 20A Power Supply Module. Input AC 100-240V. Input DC 110-150V. Output DC 24-28V. Mounting on horizontal DIN rail. Width 48mm.	3BSE088189R1	
	SS832 Power Voting Unit Input d.c. 24 V. Dual 24 V to single 24 V, 2x10A. DIN rail mounted. G2 compliant.	3BSC610068R1	
	Mains Breaker Kit for DIN Rail 115/230V 115/230V a.c. with input terminals, breaker and 3 fused (6.3A), double output terminals. Width = 102,5 mm.	3BSE022262R1	

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NE800
Network components

NE800 provide pre-configured network components that are tested with System 800xA and Compact Product Suite to ensure top quality performance and provide protection against cyber threats.

Wired switches (NE800) – includes a set of rack- and DIN-mounted switches and a wide range of modular transceivers.

Redundant Network Routing Protocol (RNRP) routers are available as part of the NE800 portfolio developed for use with both System 800xA and Compact Product Suite.

NE800 enables you to take control of your network infrastructure, and benefit from the full potential of a robust, highly performing, and secure your process automation system.
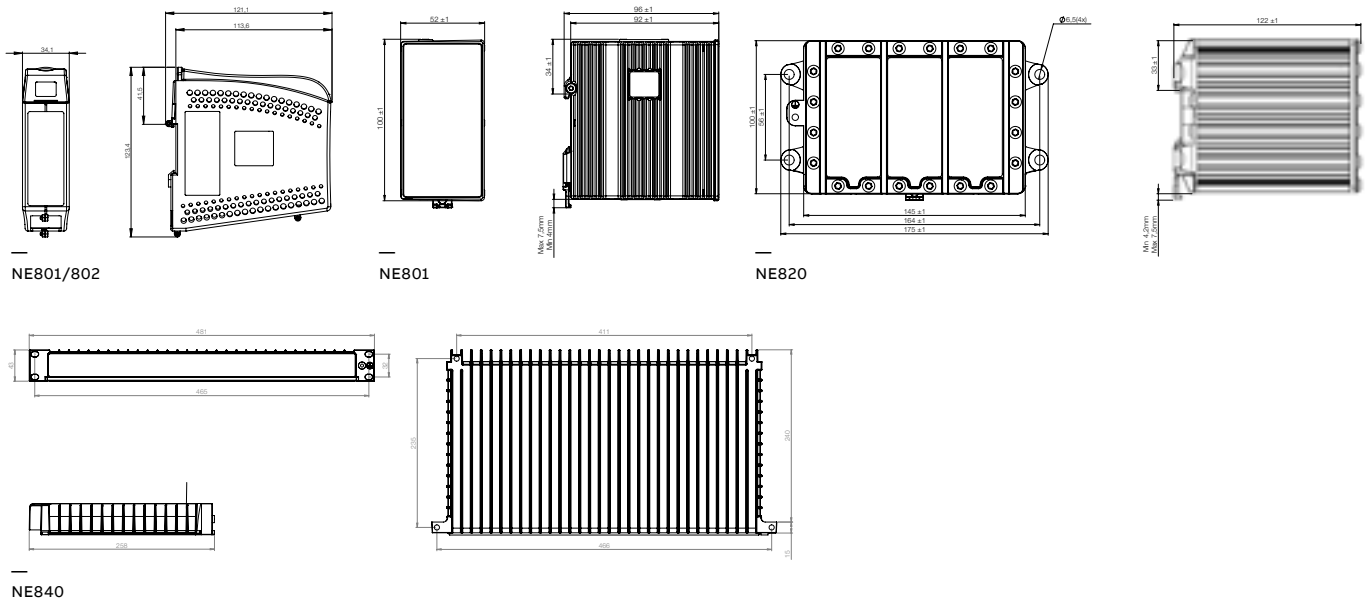
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NE870

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NE801

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PT801

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NE840

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NE800 selection guide

Specific feature	NE801	NE802	NE810	NE820	NE840
Article number	3BSE080209R1	3BSE080237R1	3BSE080207R1	3BSE080208R1	3BSE080211R1
Managed	Lightly managed (configurable using physical dip-switches)	Lightly managed (configurable using physical dip-switches)	Managed	Managed	Managed
Dimension (W x H x D)	34 x 123 x 121 mm	34 x 123 x 121 mm	52 x 100 x 101 mm	175 x 105 x 122 mm	466 x 258 x 43 mm
Weight	0.2 kg	0.2 kg	0.7 kg	2.2 kg	3.8 kg
Degree of protection	IP21	IP21	IP40	IP40	IP40
Operating voltage	9.6 to 57.6 VDC redundant power input	9.6 to 57.6 VDC redundant power input	19 to 60 VDC redundant power input	16 to 60 VDC redundant power input	90 to 264VAC, 47 to 63 Hz
Rated current	350 mA @ 12 VDC	100 mA @ 12 VDC	240 mA @ 24 VDC 120 mA @ 48 VDC	930 (1120[1]) mA @ 20 VDC 380 (450[1]) mA @ 48 VDC	350 mA @ 120 VAC 60 Hz 220 mA @ 240 VAC 50 Hz
Ethernet TX	4 x 10/100 Mbit/s	4 x 10/100/1000 Mbit/s	8 x 10/100 Mbit/s	7 x 10/100/1000 Mbit/s, 8 x 10/100 Mbit/s	7 x 10/100/1000 Mbit/s, 8 x 10/100 Mbit/s
Ethernet SFP pluggable connections (FX or TX)	1 x LC-connection, 100 Mbit/s	1 x 10/100/1000 Mbit/s	2 x 10/100/1000 Mbit/s	4 x 10/100/1000 Mbit/s	4 x 10/100/1000 Mbit/s
Digital I/O	-	-	1 x 4-ports detachable screw terminal	1 x 4-ports detachable screw terminal	1 x 4-ports detachable screw terminal
Console	-	-	1 x 1 x 2.5 mm jack	1 x USB Micro-B connector	1 x USB Micro-B connector
Operating Temperature	–25 to +70 °C	–40 to +74 ºC	–40 to +70 °C	–40 to +70 °C	–40 to +55 °C
Temperature Storage & Transport	–25 to +70 °C	–40 to +85 ºC	–50 to +85 °C	–50 to +85 °C	–40 to +85 °C
Network redundancy	-	-	Fast reconfiguration of network typology (FRNT) FRNT ring coupling	Fast reconfiguration of network typology (FRNT) FRNT ring coupling	Fast reconfiguration of network typology (FRNT) FRNT ring coupling
Mounting	DIN-mounted	DIN-mounted	DIN-mounted	DIN-mounted	Rack-mounted
Marine certificate	DNV	DNV	DNV	DNV	DNV
G3 compliant	Compliant	Compliant	Compliant	Compliant	Compliant
MTBF [2]	500,000 hours	1,182,374 hours	630,000 hours	303,000 hours	123,000 hours

[1] With 500 mA USB load
[2] according to MIL-HDBK-217K

For detailed information on each module, please visit: **www.compacthardwareselector.com**

NE801/802

NE801

NE820

NE840

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Specific feature	NE870	NE871
Article number	3BSE080239R1	3BSE080240R1
Managed	Yes	Yes
Routing	Yes	Yes
Firewall	Yes	Yes
Dimension (W x H x D)	134 x 100 x 122 mm	134 x 100 x 122 mm
Weight	1.5 kg	1.5 kg
Degree of protection	IP40	IP40
Operating voltage	16 to 60 VDC	16 to 60 VDC
Rated current	0.43 (0.60[1]) A @ 20 VDC 0.19 (0.25[1]) A @ 48 VDC	0.31 (0.48[1]) A @ 20 VDC 0.15 (0.21[1]) A @ 48 VDC
Ethernet TX	3 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45 8 x 10/100 Mbit/s, Ethernet TX, RJ-45	3 x 10/100/1000 Mbit/s, Ethernet TX, RJ-45
Digital I/O	1 x 4-ports detachable screw terminal	1 x 4-ports detachable screw terminal
Console	1 x USB Micro-B connector	1 x USB Micro-B connector
Operating Temperature	−40 to +70 °C	−40 to +70 °C
Temperature Storage & Transport	−50 to +85 °C	−50 to +85 °C
Network redundancy	Redundant Network Routing Protocol (RNRP) Fast reconfiguration of network typology (FRNT) FRNT ring coppling	Redundant Network Routing Protocol (RNRP) Fast reconfiguration of network typology (FRNT) FRNT ring coppling
Mounting	DIN-mounted	DIN-mounted
Marine certificate	DNV	DNV
G3 compliant	Compliant	Compliant
MTBF [2]	430,000 hours	430,000 hours

[1] With 500 mA USB load
[2] according to MIL-HDBK-217K

Agency approvals and standards compliance		
EMC	EN 50121-4	Railway applications – Electromagnetic compatibility – Emission and immunity of the signalling and telecommunications apparatus
	EN 55022	Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement
	EN 55024	Information technology equipment – Immunity characteristics Limits and methods of measurement
	EN 61000-6-1	Electromagnetic compatibility – Immunity for residential, commercial and light-industrial environments
	EN 61000-6-2	Electromagnetic compatibility – Immunity for industrial environments
	EN 61000-6-3	Electromagnetic compatibility – Emission standards for residential, commercial and light industrial environments
	EN 61000-6-4	Electromagnetic compatibility – Emission standard for industrial environments
	FCC part 15 Class A	
Safety	UL/IEC/EN 60950-1, IT equipment	
Marine	DNV Standard for Certification no. 2.4	
RoHS compliance	EN 50581:2012	
WEEE compliance	DIRECTIVE/2012/19/EU	

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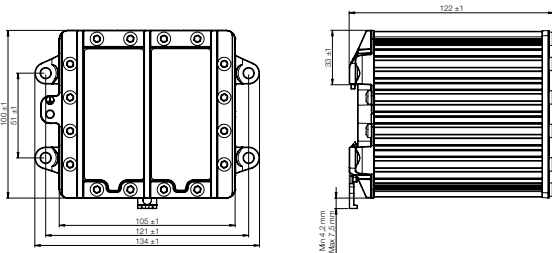
NE800
Network switches

Network switches		Article no.	
	NE801 DIN-mounted 5 ports lightly managed switch, 4 10/100Mbit RJ45 ports &100Mbit LC optical port. Redundant 24V DC-power input.	3BSE080209R1	
	NE802 DIN-mounted 5 ports lightly managed switch; 4 10/100/1000Mbit RJ45 ports & amp; 1Gbit SFP. Redundant 24V DC-power input.	3BSE080237R1	
	NE810 DIN-mounted 10 ports managed switch, 8 10/100Mbit RJ45 ports & 2 Gbit SFP ports. Redundant 24V DC-power input.	3BSE080207R1	
	NE820 DIN-mounted 19 ports managed switch, 8 10/100Mbit RJ45 ports, 7 Gbit RJ45 ports & 4 Gbit SFP ports. Redundant 24V DC-power input.	3BSE080208R1	
	NE840 Rack-mounted 19 ports managed switch, 8 10/100Mbit RJ45 ports, 7 GbitRJ45 ports & 4 Gbit SFP ports. 110/230V AC-power input.	3BSE080211R1	

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NE800
Network routers/firewalls

Network routers/firewalls		Article no.	
	NE870 DIN-mounted 11 ports RNRP router and firewall, 3 10/100/1000Mbit RJ45 ports and 8 10/100Mbit RJ45 ports. Redundant 24V DC-power input.	3BSE080239R1	
	NE871 DIN-mounted 3 ports RNRP router and firewall, 3 10/100/1000Mbit RJ45 ports. Redundant 24V DC-power input.	3BSE080240R1	

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NE800
Network accessories

Network accessories			Article no.	
		TK863 Cable.USB 2,5mm plug for NE810	3BSE080212R1	
		TK864 Micro USB Console cable for e.g. NE820, NE840, NE870 & NE871	3BSE080213R1	

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NE800
Modular Transceivers (SFPs)

Modular Transceivers (SFPs)		Article no.	
	The ABB range of Small Form-factor Pluggable (SFP) transceivers covers versions suitable for 100 Mbit/s and Gigabit applications. LC connectors are used as standard due their small size. Operating temperature specification: –40 to +85°C (–40 to +185°F)		
	PT801 Multimode, LC-connector, 2 km, 1310nm, 100Mbit/s Old type designation: MLC2	3BSE080214R1	
	PT802 Singlemode, LC-connector, 20km, 1310nm, 100Mbit/s Old type designation: SLC20	3BSE080215R1	
	PT803 Singlemode,BiDi, 20km, 1310nm TX, 1550nm RX, 100Mbit/s Old type designation: SLC20-BiDi-A	3BSE080223R1	
	PT804 Singlemode, BiDi, 20 km, 1550nm TX, 1310 RX, 100Mbit/s Old type designation: SLC20-BiDi-B	3BSE080224R1	
	PT805 Singlemode, LC-connector, 40km, 1310nm, 100Mbit/s Old type designation: SLC40	3BSE080216R1	
	PT806 Singlemode, BIDI, 40Km, 1310nmTX, 1550RX, 100Mbit/s Old type designation: SLC40-BiDi-A	3BSE080227R1	
	PT807 Singlemode, BIDI, 40Km, 1550nmTX, 1310RX, 100Mbit/s Old type designation: SLC40-BiDi-B	3BSE080228R1	
	PT808 Singlemode, LC-connector, 80km,1550nm, 100Mbit/s Old type designation: SLC80	3BSE080217R1	
	PT809 Singlemode, BiDi, 80km, 1310nm TX, 1550nm RX, 100Mbit/s Old type designation: SLC80-BiDi-A	3BSE080235R1	
	PT810 Singlemode, BiDi, 80km, 1550nm TX, 1310nm RX, 100Mbit/s Old type designation: SLC80-BiDi-B	3BSE080236R1	
	PT811 Singlemode, LC-connector, 120km,1550nm, 100Mbit/s Old type designation: SLC120	3BSE080218R1	
	PT812 Singlemode, BiDi, 120km, 1550nm TX, 1490 nm RX, 100Mbit/s. Old type designation: SLC120-BiDi-B	3BSE080233R1	
	PT813 Singlemode, BiDi, 120km, 1490nm TX, 1550nm RX, 100Mbit/s. Old type designation: SLC120-BiDi-A	3BSE080234R1	

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NE800
Modular Transceivers (SFPs)

Modular Transceivers (SFPs)		Article no.	
	PT814 RJ-45, 100m, 10/100Mbit/s TX	3BSE080232R1	
	PT831 Multimode, LC-connector, 550m, 850nm, SX, 1000Mbit/s Old type designation: GMLC550	3BSE080222R1	
	PT832 Multimode, LC-connector, 2km, 1310nm,SX+, 1000Mbit/s Old type designation: GMLC2	3BSE080225R1	
	PT833 Singlemode, LC-connector,10km,1310nm, LX, 1000Mbit/s Old type designation: GSLC10	3BSE080219R1	
	PT834 Singlemode,BiDi, 20km 1310nmTX, 1490nm RX, 1000Mbit/s Old type designation: GSLC20-BiDi-A	3BSE080229R1	
	PT835 Singlemode, BiDi, 20 km, 1490TX, 1310nm RX, 1000Mbit/s Old type designation: GSLC20-BiDi-B	3BSE080230R1	
	PT836 Singlemode,LC-connector,50km,1550nm,XD, 1000Mbit/s Old type designation: GSLC50	3BSE080220R1	
	PT837 Singlemode, LC-connector, 80km, 1550nm, ZX, 1000Mbit/s Old type designation: GSLC80	3BSE080221R1	
	PT838 Singlemode, LC-connector, 110km, 1550nm, EZX, 1000Mbit/s. Old type designation: GSLC110	3BSE080231R1	
	PT839 GCX100-Copper,RJ-45,100m, 1000Base TX	3BSE080226R1	

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Specifications Optical Transceivers

Product title	Type	Link speed (Mbit/s)	Indicative range (km)	Power budget (dB)	TX/RX wavelength (nm)
PT801	Multi mode	100	2	20	1310/1310
PT802	Single mode	100	20	17	1310/1310
PT803	Single mode, BiDi	100	20	18	1310/1550
PT804	Single mode, BiDi	100	20	18	1550/1310
PT805	Single mode	100	40	30	1310/1310
PT806	Single mode, BiDi	100	40	26	1310/1550
PT807	Single mode, BiDi	100	40	26	1550/1310
PT808	Single mode	100	80	30	1550/1550
PT809	Single mode, BiDi	100	80	29	1310/1550
PT810	Single mode, BiDi	100	80	35	1550/1310
PT811	Single mode	100	120	35	1550/1550
PT812	Single mode, BiDi	100	120	32	1550/1490
PT813	Single mode, BiDi	100	120	32	1490/1550
PT814	RJ45	10/100	0.1	-	-
PT831	Multi mode	1000	0.3–0.55	9	850/850
PT832	Multi mode	1000	1–2	1	1310/1310
PT833	Single mode	1000	10	11	1310/1310
PT834	Single mode, BiDi	1000	20	15	1310/1490
PT835	Single mode, BiDi	1000	20	15	1490/1310
PT836	Single mode	1000	50	20	1550/1550
PT837	Single mode	1000	80	24	1550/1550
PT838	Single mode	1000	110	30	1550/1550
PT839	RJ45	1000	0.1	-	-

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Fieldbus Network
FOUNDATION Fieldbus Network Components

FOUNDATION Fieldbus HSE/H1 Linking Device

LD 800HSE EX links the FOUNDATION Fieldbus HSE protocol to the FOUNDATION Fieldbus H1 protocol and vice versa. Up to 4 external powered H1 lines can be connected to one LD 800HSE EX. Two LD 800HSE EX can be combined to a redundant set of devices.
In this case the Redundancy Link cable is required.

Linking Devices		Article no.	
	LD 810 HSE EX Linking Device LD 810 HSE EX module for DIN rail mounting with 4 H1 links and one HSE connector. The module itself needs external 24 VDC power supply. H1 links must be powered separately. Restrictions: Linking Device LD 810HSE Ex is not suitable for replacing one of the LD 800 Linking Devices in a redundant pair. To clarify, both devices in the redundant pair must be replaced with LD 810HSE Ex. Redundancy cable for LD 810HSE Ex can be made / procured by the end customer directly & need not be ordered through ABB.	3BSE091722R1	

Accessories Linking Device LD 800HSE	Article no.	
Redundancy Link Cable, 0,5m Redundancy Link Cable links two LD 800HSE to a redundant set of devices.	3BDH000281R1	

Media and Documentation		Article no.	
	Media CD-ROM LD 800HSE/LD 800HSE Ex, Version 3.6.0, English Documentation in pdf-format, tools, capabilities file, and bitmaps for LD 800HSE/LD 800HSE EX.	3BDD011678R0801	
	Device Management FOUNDATION Fieldbus Linking Device, LD 800HSE 3.6.0 Describes in detail the FOUNDATION Fieldbus Linking Device LD 800HSE/LD 800HSE EX features, hardware installation, configuration, and diagnostics.	3BDD011677-600	

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Fieldbus Network
PROFIBUS Network Components

PROFIBUS Redundancy Link Module RLM01		Article no.	
	The RLM01 is delivered with a printed manual.		
	RLM01, PROFIBUS Redundancy Link Module for PROFIBUS line redundancy Converts a non-redundant PROFIBUS line to two redundant RS485 lines or vice versa. Germanischer Lloyd (GL) certified (cat. A,B,C,D) in connection with power supply filter (3BDZ000397R1).	3BDZ000398R1	
	Power Supply Filter (surge) 24 V DC Mandatory to fulfill the requirements of Germanischer Lloyd (GL). WAGO article no. 750-626	3BDZ000397R1	

PROFIBUS DP Accessories		Article no.	
	PCO 010, PROFIBUS DP connector, standard max. 12 Mbit/s, 35° cable outlet, IP40, without bus termination Phoenix Contact article no. 2744597	3BDZ000370R1	
	PCO 011, PROFIBUS DP connector with bus termination max. 12 Mbit/s, 35° cable outlet, IP40, switchable bus termination Phoenix Contact article no. 2708232.	3BDZ000371R1	
	PCO 012, PROFIBUS DP connector with bus termination and adapter max. 12 Mbit/s, 35° cable outlet, IP40, switchable bus termination, programming connection SUB-D Phoenix Contact article no. 2708245	3BDZ000372R1	

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Extended Warranty Time
S800 I/O, S900 I/O, Fieldbus and AC 800M

Extended warranty time on hardware for S800 I/O, S900 I/O, Fieldbus and AC 800M		Article no.	
	Extended Warranty 12 additional months S800 I/O, S900 I/O, Fieldbus and AC 800M. Note that the price for the Extended Warranty Time order will be calculated as 3 percentage of the affected S800 I/O, S900 I/O, Fieldbus and AC 800M articles in the accompanying order.	3BSE049878R1	
	Extended Warranty 24 additional months S800 I/O, S900 I/O, Fieldbus and AC 800MI/O. Note that the price for the Extended Warranty Time order will be calculated as 6 percentage of the affected S800 I/O, S900 I/O, Fieldbus and AC 800M articles in the accompanying order.	3BSE049878R2	
	Extended Warranty 36 additional months S800 I/O, S900 I/O, Fieldbus and AC 800M. Note that the price for the Extended Warranty Time order will be calculated as 9 percentage of the affected S800 I/O, S900 I/O, Fieldbus and AC 800M articles in the accompanying order.	3BSE049878R3	

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S800 I/O

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AC 800M controller

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S900 I/O

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Compact Product Suite
References

This page gives you some references and links to more useful Compact Product Suite information. For more information about Compact Product Suite please also visit our web:

solutions.abb/compactproductsuite

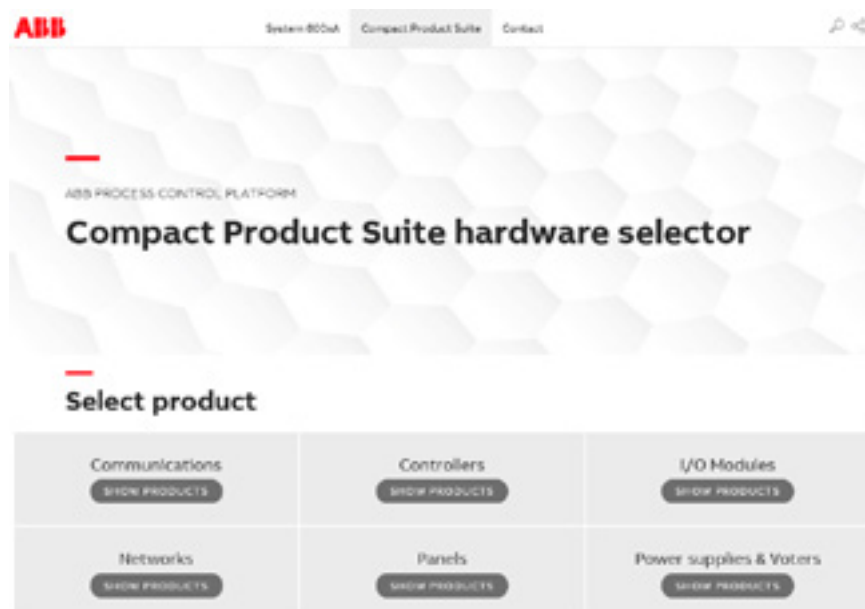| Compact Product Suite References |
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| [1] Compact Product Suite - Control products for process automation, 3BSE063717 |
| [2] Compact Control Builder AC 800M and S 800 I/O, 3BSE042578 |
| [3] Compact HMI 6.0 Overview, 3BSE040833 |
| [4] Panel 800 Version 6.2 Overview, 3BSE094397 |
| [5] For more information about the Compact Product Suite, please visit: **solutions.abb/compactproductsuite** |
| [6] For more information about Compact Product Suite hardware please visit: **compacthardwareselector.com** |
| [7] For information and support about Distributed Control Systems, please visit: **abb.com/controlsystems** |

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Compact Product Suite Hardware Selector
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