

PRODUCT CATALOG

ABB Ability™ Symphony® Plus



SD Series controllers

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HPC800

HPC800 (HC800 + CP800)

HPC800 is the ideal controller for large and complex control applications that require large capacity and high computing power. It accommodates up to 30,000 function blocks and provides closed loop control of up to 5,000 I/O points in under 250 milliseconds.

Technical data	
Processor	Industrial grade RISC type processor
Memory	64 MB RAM, 4 MB ROM, 2 MB NVRAM
Power requirements	24 VDC $\pm$ 10% at 400 mA; 10 W typical (5 W per module)
Redundant controllers	Optional redundancy, bumpless switchover
Programmability	Harmony function codes, C, Batch 90 and user defined function codes (UDF) Up to 30,000 function block addresses
Communications	
• Console HMI and engineering station	2 x redundant 10/100 Mbps Ethernet PN800 Plant Network
• I/O and gateway bus	Redundant 4 Mbps HN800
• Controller peer-to-peer	Redundant 4 Mbps CW800
Ports	
• Time synchronization	1 10/100 Mbps Ethernet SNTP Protocol (EN1 A)
• Foreign device interface	1 10/100 Mbps Ethernet (EN1 B), supports up to 8 Modbus TCP servers and 128 Modbus TCP clients when used with Harmony Gateway Software (HGS) version 6.0 or later 1 RS-232-C serial port (reserved for future use)
Service port	2 RS232C ports in mini-USB form factor, one on HC800 front plate, one on CP800 front plate
Ambient temperature	0 °C to 55 °C (32 °F to 131 °F). Tested according to IEC/EN 60068-2-1, IEC/EN 60068-2-2, IEC/EN 60068-2-14

Bundled kits		HPC800K01	HPC800K02
HC800	Harmony control processor module	1	2
CP800	Communication processor module	1	2
MB810	Module mounting base	1	2
CTB810	Communication terminal board (left)	1	1
CTB811	Communication terminal board (right)	1	1
TER800	Bus terminator	4	4

HC800 – Control module. Supports 30,000 function blocks and executes Modbus TCP interface

CP800 – Communication module. Provides communication between HC800 and PN800 (Ethernet-based plant network)

MB810 – Mounting base for the HC800 and CP800 modules

CTB810 and CTB811 – Communication terminal boards for the left- and right-hand sides respectively of the HPC800

TER800 – Hnet bus terminator