

DATA SHEET

# SattLine Version 3 Hardware

## Outline of modules

SattLine is a family of rail-mounted modules, consisting of CPU:s, communication modules, power supply modules and various accessories.



The SattLine version 3 hardware update includes a new controller, CPU 80, which supports controller configurations for:

- CI853 (Serial)
- CI854B (ProfiBus)
- CI865 (ControlNet)

SattLine version 3 also support Series 200 type of CPU and main components. For updated information regarding SattLine version 3 hardware please visit our web.

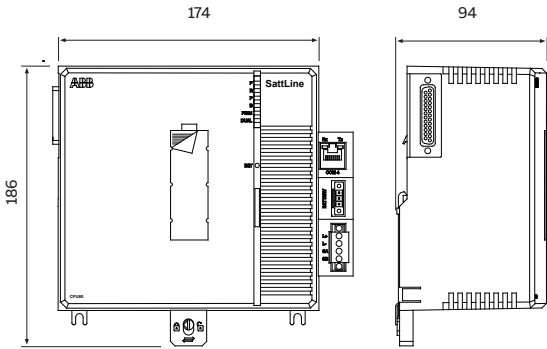
Features / CPUs	CPU80
Article number	3BSE088456R1
Processor Unit	<b>CPU80 incl:</b> 1 CPU80 and required optional items.
Clock frequency	450 MHz
Memory (RAM)	256 MB
RAM available for application	208.985 MB
Processor type	MPC8270
Flash memory for storage of application and data	Yes
CPU redundancy support	No
Flash PROM for firmware storage	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 660/750 mA
Power dissipation typ.	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	No

Features / CPUs	CPU80
Real-time clock stability	50 ppm
Comm. modules on CEX bus	12
Supply current on CEX bus	Supply current: Max 24 V - 2.4 A (CPU80 has an embedded auto fuse)
Ethernet channels	2
Ethernet interface	10/100 Mbit/s
Control Network protocol	MMS (Manufacturing Message Service)
Recommended Control Network backbone	100 Mbit/s switched Ethernet
RS-232C interface	1 for service tool (COM 4)
Temperature	
• Operating	+5 to +55 °C (+41 to +131 °F)
• Storage	-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/s <sup>2</sup> 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	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 60079-15 Hazardous location: cULus Class1, Zone2, AEx nA IIC T4, ExnA IIC T4Gc X RoHS compliance: EN 50581:2012 WEEE compliance: DIRECTIVE/2012/19/EU
Emission	Tested according to EN 61000-6-4 EMC – Generic Emission Standard, Part 2 – Industrial Environment
Immunity	Tested according to EN 61000-6-4 EMC – Generic Emission Standard, Part 2 – Industrial Environment
Dimensions	Width 174 x Height 186 x Depth 94 mm
Weight (including base)	1600 g (3.5 lbs)

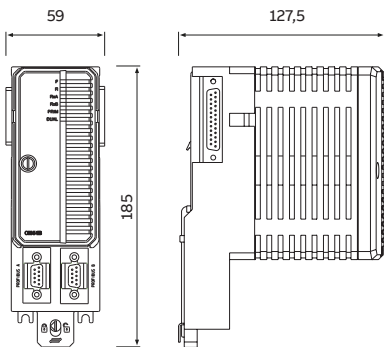
Supported Communication modules	PROFIBUS DP	SATT I/O	RS-232 C
Module	CI854B	CI865	CI853
Article number	3BSE069449R1	3BSE040795R1	3BSE018103R1
Protocol	DP-V1 (PA via Linking Device)	ABB's Satt I/O	MODBUS RTU master, COMLI master/slave, Siemens 3964R master, User defined protocols
Master or slave	Master	Master	Master/slave
Number of channels	2	1	2
Max units on CEX bus	12	4	12
Transmission speed	9.6 - 12,000 kbit/s	-	75 - 19,200 kbit/s
Connectors	DB female (9-pin)	BNC	RJ-45 female (8-pin)
24 V current consumption	typical 190 mA	typical 120 mA	typical 100 mA
Protection class	IP20 according to EN60529		
Certification <sup>(1)</sup>			
• CE-marked	Yes	Yes	Yes
• 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)	600 g (1.3 lbs)	520 g (1.2 lbs)

## Measurements

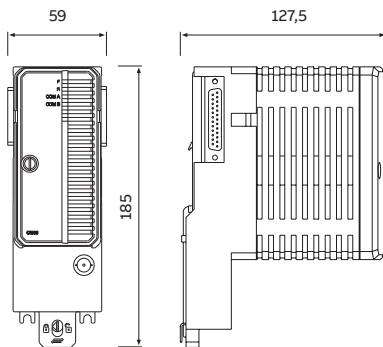
### CPU80



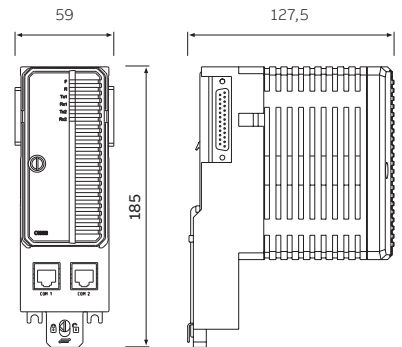
### CI854B



### CI865



### CI853



Dimensions in mm

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**[new.abb.com/control-systems/satt](http://new.abb.com/control-systems/satt)  
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