

SCI200K01

ABB Ability™ Symphony® Plus Hardware Selector



The SCI200 S+ compact Communications Interface module is the general purpose Ethernet interface for SPCxxx controllers.

The SCI200 supports IEC60870-5-104, DNP 3.0 and Ethernet IP protocols and communicates with SPCxxx controllers over the HN800 IO bus.

SCI200K01 is a communication interface kit that includes: 1x SCI200 module + 1x MB605 base.

Features and benefits

IEC60870-5-104 interface capabilities include:

- Master or Slave and support for all major data types.
- As a Master connect up to 16 Slave devices
- As a Slave connect up to 8 Masters

DNP 3.0 interface capabilities include:

- Master (only) support for Level 3+ data objects
- Send Single, Double and Set-Point commands
- Supports both direct operate and Select Before Operate control models.
- Master supports up to 16 DNP outstations and 1500 Total points

General info	
Article number	SCI200K01
Life cycle status	ACTIVE
Protocol	IEC 60870-5-104 DNP 3.0 Ethernet IP
Communication type	Master/Slave
Capacity	IEC60870-5-104 Master or Slave up to 16 Devices and 1500 points TOTAL DNP 3.0 Master [only] up to 16 outstations and 1500 points TOTAL Ethernet IP up to 1500 points TOTAL
Transmission speed	4 MBps
Communication connection(s)	2x ST style connectors with right angle strain relief, 40 mm (1.5 inches) bend radius
Communication physical layer	62.5/125 µm Multi-mode, -3.5 dB/km, graded index, 840 nm wavelength, 160 MHz/km Fiber Optic cable
Diagnostics port	1x mini USB form factor on module front plate
Line redundancy	Yes
Module redundancy	No
Hot Swap	Yes
Form factor	Compact (127mm)
Mounting	Horizontal Row
HN800 bus length	90 mm
MTBF (per MIL-HDBK-217-FN2)	SCI200 PR: E = 296,291 hours, MB605 PR: D = 2,382,599 hours
MTTR (Hours)	SCI200 MTTR = 1 hour, MB605 MTTR = 8 hours

Detailed data	
Module power requirements	100 mA (typical) @ 24 VDC (+16%/-10%) per module
Module power connection(s)	POWER TB on CHBX01L
Overvoltage category	Category 1 for power. Tested according to IEC/EN 61010-1
Mounting details	MB605 mounting base for 1 SCI200 module

Environment and certification	
Temperature, Operating	-40 to +70 °C Tested according to IEC/EN 60068-2-1, IEC/EN 60068-2-2
Temperature, Storage	-40 to +85 °C Tested according to MIL-STD-810G
Relative humidity	20% to 95% @ 40°C (104°F) non-condensing. Tested according to IEC/EN 60068-2-78, IEC/EN 61298-3
Protection class	IP20 according to EN 60529, IEC 529
Vibration (operational sinusoidal)	5 to 60 Hz 0.137 mm (0.0054 in.), 60 to 150 Hz 1.0 G. Tested according to IEC/EN 60068-2-6
Vibration (transportation)	10 to 500 Hz. Tested according to MIL-STD-810G
Shock (storage)	15 G, 11 msec. Tested according to IEC/EN 60068-2-27
Drop	100 mm. Tested according to IEC/EN 60068-2-31
Altitude (operational)	Sea level to 3,048 meters (10,000 ft.) Tested according to MIL-STD-810G
Altitude (storage)	Sea level to 12,192 meters (40,000 ft.) Tested according to MIL-STD-810G
Air quality	ISA S71.04 G1 (Standard), cRBX01A (Enhanced) ISA S71.04 G3 compliant version modules are also available
ESD immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-2, Severity level 3
Surge immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-5, Severity level 3
Electrical fast transient immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-4, Severity level 3
Radiated RFI immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-3, Severity level 3
Conducted Immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-6, Severity level 3
Magnetic field immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-8, Severity level 4
Radiated emission	Tested according to IEC/EN 61000-6-4, CISPR 11 + A1, CISPR 16-1-1, Group 1, Class A, ISM equipment
Conducted emission	Tested according to IEC/EN 61000-6-4, CISPR 11 + A1, CISPR 16-1-1, Group 1, Class A, ISM equipment
Voltage dips and interruption immunity	Tested according to IEC/EN 61000-6-2, IEC/EN 61000-4-11
CSA non-hazardous locations	Certified for use as process control equipment in an ordinary (non-hazardous) location
CSA hazardous, nonincendive locations	Class I, Division 2, Groups A, B, C, D
CE Mark	CE Mark EMC directive 2014/30/EU & Low voltage directive 2014/35/EU
RoHS compliance	RoHS Directive 2015/863
WEEE compliance	DIRECTIVE/2012/19/EU

Dimensions	
Width	45 mm
Height	127 mm
Depth	135 mm
Weight (include base)	450 g

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