Accessories: Communication Modules

The digital transformation journey begins by leveraging the SolaHD Communication Module's (SCM) communication capability for increased efficiency and predictive maintenance. The SCM provides network connectivity support for one or two SDN-D Series high performance power supplies over popular industrial protocols. This allows key diagnostic data, alarms and operating parameters to be communicated to supervisory systems.

- Each DIN rail mounted SCM module can provide network connection to one or two SDN-D power supplies.
- Two 8 inch I2C connection cables are included with each SCM module for direct connection to the power supplies. The SCM module must be located close enough to the SDN-D power supplies to be connected with the I2C connection cables.

Monitoring the health and performance of devices ensures greater reliability to reduce unscheduled downtime due to equipment failures, lower maintenance costs and extend equipment life. Utilize the SCM to overcome common operational challenges:

- Machines and devices offer no condition monitoring, leading to unexpected downtime.
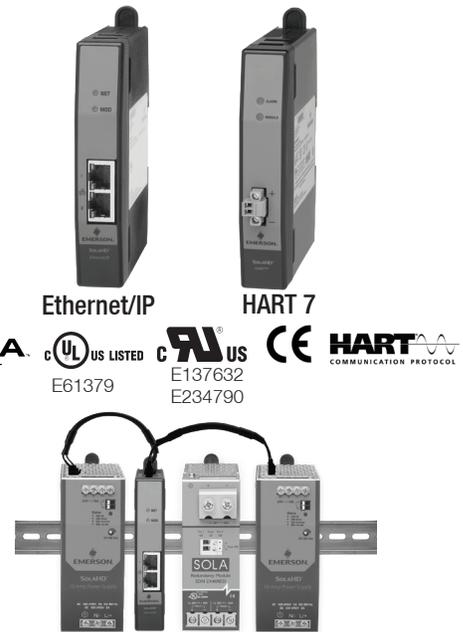- Unable to identify problematic devices and schedule maintenance.

Features
- Monitor important power supply parameters to identify an abnormal condition.
- Monitor power supply current and temperature and set alarm threshold.
- Monitor power supply total turn on time to indicate end of useful life.
- Monitor SCM temperature as a proxy for internal enclosure temperature.
- Monitor power supply events, event counts, and the event logs (only SCM-E-EIP).

Certifications and Compliances
All Models
- CE
  - LV – IEC/EN 62368-1; IEC/EN 61010-1; IEC/EN 61010-2-201
- CB
  - IEC/EN 62368-1; IEC/EN 61010-1; IEC/EN 61010-2-201; IEC/EN 60950-1
- c(UL)us Listed, Ind. Control Equip., E61379
  - UL/CSA 61010-1; UL/CSA 61010-2-201
- c(UL)us Recognized Component, ITE, E137632; Haz Loc E234790

Ethernet/IP   HART 7

ODVA CONFORMANT   c(UL)us LISTED E61379   c(UL)us E137632 E234790   CE   HART COMMUNICATION PROTOCOL

Typical Connection: SDN-D to SCM

- UL/CSA 60950-1; UL/CSA 62368-1; UL 121201/CSA C22.2 No. 213 – Class I Division 2, Groups A, B, C, D, T4; UL/CSA 60079-0; UL/CSA 60079-7 Class I, Zone 2, IIC, T4
- ATEX Directive
  - ⟨Ex⟩ II3G Ex ec IIC Gc
  - IEC/EN 60079-0; IEC/EN 60079-7
- IECEx Certified
  - Ex ec IIC Gc
  - IEC/EN 60079-0; IEC/EN 60079-7
- RoHS Compliant
  - EU RoHS
  - China RoHS

Model SCM-E-EIP
- CE
  - EMC – EN 55032 Class B; EN 61000-3-2; EN 61000 3-3; EN 61326-1; EN 55011 Group 1 Class B; EN 55035; EN 61000-6-1; EN 61000-6-2; EN 61000-6-3; EN 61000-6-4
- ODVA CONFORMANT

Model SCM-W-HRT7
- CE
  - EMC – EN 55032 Class B; EN 61000-3-2; EN 61000 3-3; EN 55011 Group 1 Class B; EN 61000-6-3; EN 61000-6-4; EN 55035
- HART COMMUNICATION PROTOCOL

Related Products
- Power Supply Redundancy (RED) Modules

Accessories: Communication Modules

Specifications

Catalog Number	SCM–E–EIP	SCM–W–HRT7
General		
Protocol	Ethernet/IP (ODVA Conformant)	HART 7 (Fieldcomm Group Registered)[1]
Physical		
Power Supply Connection	Either 1 or 2 SDN-D Power Supplies can be supported by a single SCM module. Power and communication are provided with included 8 inch cables.	
Network Connection and Topologies Supported	Dual RJ-45. Pass-through. Star, Linear, or Device Level Ring.	2-wire terminal connection. Point-to-Point or Multidrop.
Transmission Speed	10 Mbps, 100 Mbps	FSK HART – 1200 baud
Transmission Medium	Shielded CAT6 Twisted-pair cable	Individual shielded twisted-pair cable
Data		
Power Supply Parameters	Output Voltage, Output Current, Input Voltage, Power Supply Temperature, Max Output Voltage, Max Output Current, Max Input Voltage, Max Power Supply Temperature	
Power Supply Alarms and Warnings	Output Short Circuit, Over Voltage, Over Temperature, Power Boost	
User Configurable Warnings	Output Current, Power Supply Temperature	
Power Supply Timers	Lifetime, Time since last DC power up	
Power Supply Counters	Output Short Circuit, Over Voltage, Over Temperature, Power Boost	
Other Data	Part number, Serial number, Revision number, Power Supply Status, SCM Status, SCM Temperature	
Weight and Dimensions		
H x W x D – in (mm)	5.51 x 1.00 x 4.27 (139.94 x 25.46 x 108.41) with sliding arm 4.85 x 1.00 x 4.27 (123.28 x 25.46 x 108.41) without sliding arm	
Weight – oz (g)	5.7 (161)	4.8 (137)
Environmental		
Temperature °C (°F)	Storage: -40 to +85 (-40 to +185) Operating: -40 to +70 (-40 to +158)	
Humidity	5% to 95% RH, noncondensing	

Network and Module Status Indicators

SCM–W–HRT7 LED Indicator	Status	Meaning
Module Status	Green, steady	Normal operation, no errors
	Red, blinking	Incompatible supply connected
Alarm Status	Green, steady	No alarm/alerts active
	Green, blinking	Device Alert active - Maintenance
	Red, blinking	Device Alert active - Failure
	Amber, blinking	Process Alarm active

SCM–E–EIP LED Indicator	Status	Meaning
Module Status	Off, steady	No power
	Green, steady	Device operational
	Green, blinking	Standby
	Red, blinking	Major Recoverable Fault
	Green/Red, blinking	Self-test
Network Status	Off, steady	Not powered, no IP address
	Green, steady	Connected
	Green, blinking	No connections
	Red, blinking	Connection timeout
	Red, steady	Duplicate IP
	Green/Red, blinking	Self-test

1. Registration pending.

SoLaHD™

Accessories: Communication Modules

Selection Table

Catalog Number	Description
SCM−E−EIP	2-Port EtherNet/IP Network Communications Module
SCM−W−HRT7	HART 7 Network Communications Module

Dimensions - in (mm)

1.00 (25.46)

4.27 (108.41)

5.51 (139.94)

4.85 (123.28)

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