

Power Supply Communication Modules (SCM)

The digital transformation journey begins by leveraging the SolaHD Communication Module's (SCM) ability to increase operational effectiveness and predict maintenance requirements. Each SCM provides access to monitoring and alarm data for single and paired SDN-D Series high performance power supplies via web server and popular fieldbus networks. This allows key diagnostic data, alarms, and operating parameters to be communicated to supervisory systems. 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. The SCM can be utilized to overcome operational challenges with condition monitoring leading to a reduction of unplanned downtime by the ability to diagnose problematic devices and schedule maintenance actions.

Applications

- Edge Monitoring
- Predictive Maintenance
- Asset Tracking
- Operational Troubleshooting



Ethernet/IP

Modbus TCP

HART 7

Features

- Monitors power supply operation and annunciate abnormal conditions
- Report alarms for user-set levels of current loading, temperature, voltage, and others
- Track load-based useful life and trigger evaluation for replacement
- Track and alarm on control enclosure temperature changes
- Monitor power supply events, event counts, and the event logs (SCM-E-EIP & SCM-E-MBUS)
- Visually monitor operating status by onboard LED indicators
- Each SCM supports (2) SDN-D series power supplies
- Each module ships with the Power supply cables - no separate power connection required

Certifications and Compliance

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
- **UL** Listed, Ind. Control Equip., E61379
- UL/CSA 61010-1; UL/CSA 61010-2-201
- **UL** Recognized Component, ITE, E137632; Haz Loc E234790
- 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:**
• **Ex** II3G Ex ec IIC Gc
- IEC/EN 60079-0; IEC/EN 60079-7
- **IECEx:**
- Ex ec IIC Gc
- IEC/EN 60079-0; IEC/EN 60079-7
- **RoHS Compliant**
- EU RoHS
- China RoHS

Model SCM-E-EIP & SCM-E-MBUS

- **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



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



Related Products

Power Supply Redundancy (RED) Modules

For more information:
www.Emerson.com/SolaHD

SOLAHD™



Power Supply Communication Modules (SCM)

Specifications

General			
Catalog Number	SCM-E-EIP	SCM-W-HRT7	SCM-E-MBUS
Protocol	Ethernet/IP (ODVA Conformant)	HART 7 (Fieldcomm Group Registered) ①	Modbus TCP
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.	Dual RJ45. Pass through, Star, Linear, or Device Level Ring
Transmission Speed	10 Mbps, 100 Mbps	FSK HART – 1200 baud	10 Mbps, 100 Mbps
Transmission Medium	Shielded CAT6 Twisted-pair cable	Individual shielded twisted-pair cable	Shielded CAT6 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)	5.7 (161)
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 & SCM-E-MBUS 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

Dimensions - in (mm)

