# **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

### 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
- c(UL)us Listed, Ind. Control Equip., E61379 - UL/CSA 61010-1; UL/CSA 61010-2-201
- c Fu<sup>i</sup>us Recognized Component, ITE, E137632; Haz Loc E234790
- UL/CSA 60950-1; UL/CSA 62368-1; UL 121201/CSA C22.2

For more information: www.Emerson.com/SolaHD

SOLAHD

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:
  - ⟨€x⟩ II3G Ex ec IIC Gc
  - IEC/EN 60079-0; IEC/EN 60079-7
- IFCFY
  - 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

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- 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

MODVA

#### 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

### **Related Products**

Power Supply Redundancy (RED) Modules



Modbus TCP HART 7

Ethernet/IP

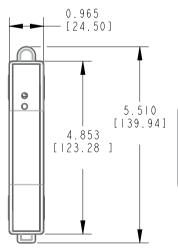
## Specifications

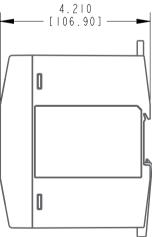
General				
Catalog Number	SCM-E-EIP	SCM-W-HRT7	SCM-E-MBUS	
Protocol	Ethernet/IP (ODVA Conformant)	HART 7 (Fieldcomm Group Registered) ①	Modbus TCP	
	Phy	<i>y</i> sical	<u>^</u>	
Power Supply Connection	Either 1 or 2 SDN-D Power Supplies can be supported by a single SCM module. Power and communication 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	
	D	ata		
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	l 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)	
	Enviro	nmental	·	
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
	Green, steady	Normal operation, no errors
Module Status	Red, blinking	Incompatible supply connected
	Green, steady	No alarm/alerts active
	Green, blinking	Device Alert active - Maintenance
Alarm Status	Red, blinking	Device Alert active - Failure
	Amber, blinking	Process Alarm active
SCM-E-EIP & SCM-E-MBUS LED Indicator	Status	Meaning
	Off, steady	No power
	Green, steady	Device operational
Module Status	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)**





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