

SMART SENSOR

CSS 014 | DC 24 V



- > Analog/digital interface
- > Small size
- > Easy DIN rail and/or screw mount
- > Quick connection (M12 plug-in connector)
- > High accuracy
- > Large temperature and humidity range
- > Various application areas (IEC 61010-1/DIN EN 61010-1)

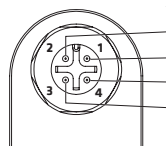
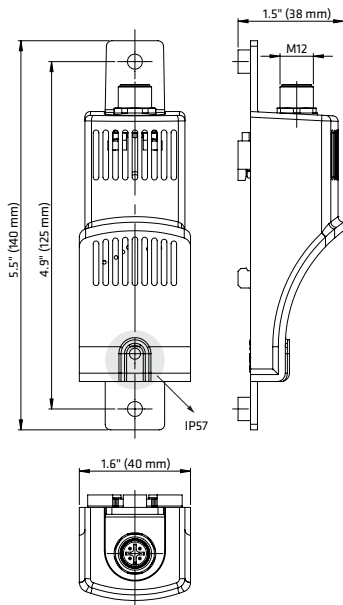
The compact Smart Sensor CSS 014 electronically records temperature and humidity and converts the measured data into a standardized analog 4-20 mA or a digital IO-Link signal. The converted value signals can be utilized or further processed by a control or monitoring unit, e.g. a PLC control. The Smart Sensor is suitable for installation inside and outside the enclosure, even in harsh environmental conditions as can be found in the wind power industry: in shielded outdoor areas and exposed to vibrations.



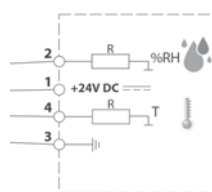
TECHNICAL DATA

Measuring signals analog (4-20 mA)/digital (IO-Link) digital (IO-Link)	temperature, humidity events, diagnosis, device data
Max. reaction time	3 min.
Load resistance (external)	≤ 500 Ω (4-20 mA only)
Connection	M12 round plug connector, IEC 61076-2-101, 4-pin, A-coded, shielded
Electrical protection	Reverse-polarity, short circuit, overvoltage protection
Mounting	clip for 35 mm DIN rail, EN 60715 or M5 screws (not included)
Housing	plastic, UL94 V-0, light grey
Dimensions	5.5 x 1.6 x 1.5" (140 x 40 x 38 mm)
Weight	approx. 1.8 oz. (50 g)
Mounting position	vertical (connection on top)
Storage temperature	-40 to +185 °F (-40 to +85 °C)
Operating / Storage humidity	max. 90 % RH (non-condensing)
Protection type ¹ / Protection class	IP20 (sensor only: IP57) / III (SELV)
Approvals	UL File No. E500143, VDE (according to IEC 61010-1/DIN EN 61010-1), EAC
Note	other measuring ranges available upon request

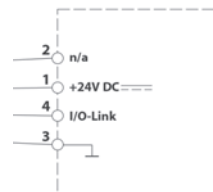
¹ The PCB (printed circuit board) is coated on both sides with a certified protective lacquer to protect against corrosion and for improvement of the tracking resistance.



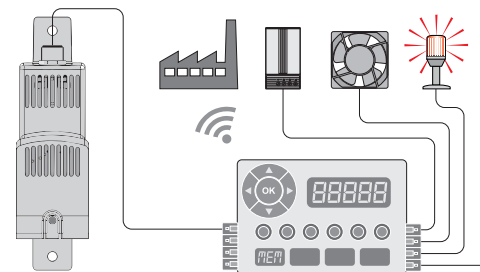
Pin assignment for 4-pin M12 round plug connector



analog 4-20 mA



IO-Link



Wiring Example

Part No.	Interface	Operating voltage	Power consumption max.	Temperature measuring range	Humidity measuring range	Operating temperature
01420.2-00	4-20 mA (analog)	DC 24 V (DC 12-30 V)	1.8 W (typically 0.4 W)	-40 to +144 °F (40 to +60 °C) ± 1 K	0 to 100 % RH ± 4% ²	-40 to +158 °F (-40 to +70 °C)
01411.2-00	IO-Link (digital, specified acc. to version 1.1)	DC 24 V (DC 18-30 V)	0.3 W	-40 to +176 °F (-40 to +80 °C) ± 0.3 K	0 to 100% RH ± 3% ²	-40 to +176 °F (-40 to +80 °C)

² Tolerance within 20 to 80 % RH (please request diagram for tolerances outside this range).