



DSCOM-R

Multifunctional duct transmitter

DSCOM-R are multifunctional duct transmitters which measure temperature, relative humidity, carbon monoxide (CO) and nitrogen dioxide (NO₂) levels in ducts. They are Power over Modbus supplied. The measured value and all parameters are accessible via Modbus communication.

Key features

- Suitable for duct mounting
- Selectable temperature, relative humidity, CO and NO₂ ranges
- Silicon based sensor elements for CO and NO₂ measurements
- Bootloader for updating the firmware via Modbus RTU communication
- Modbus RTU communication
- Long-term stability and accuracy
- Replaceable CO / NO₂ sensor module

Area of use

- Measurement of temperature, relative humidity and CO / NO₂ in ducts
- Monitoring of air quality in ducts

Article codes

Article code	Supply voltage	Connection
DSCOM-R	24 VDC, PoM	RJ45

Technical specifications

Supply voltage	24 VDC, Power over Modbus	
Imax	113 mA	
Accuracy	±0,4 °C (-30—70 °C)	
	±3 % rH (0—100 % rH)	
	Trend sensor (CO and NO ₂)	
Protection standard	Enclosure: IP54, Probe: IP20	
Ambient conditions	Temperature	-30—70 °C
	Rel. humidity	0—100 % rH
Warm up time	1 hour	

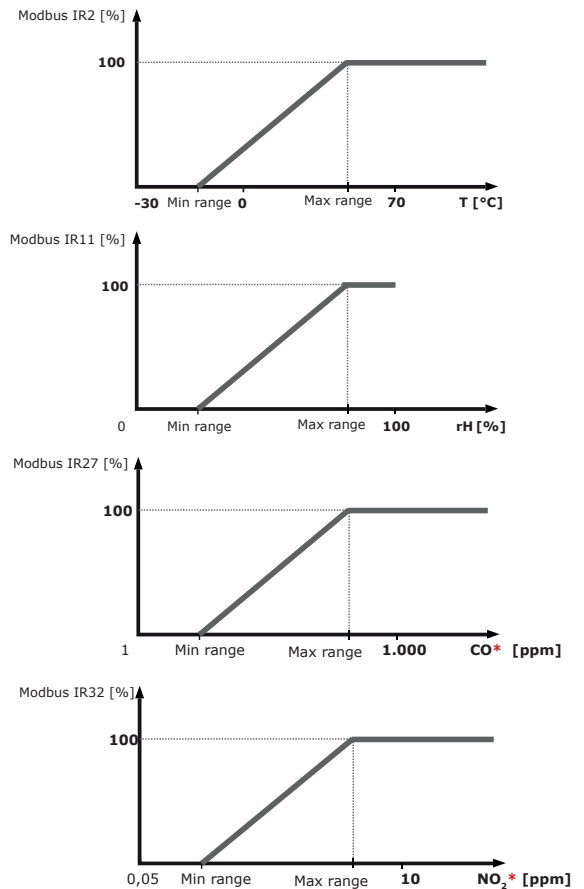
Wiring and connections

RJ45 socket (Power over Modbus)

Pin 1	24 VDC	Supply voltage
Pin 2		
Pin 3	A	Modbus RTU communication, signal A
Pin 4		
Pin 5	/B	Modbus RTU communication, signal /B
Pin 6		
Pin 7	GND	Ground, supply voltage
Pin 8		



Operational diagram



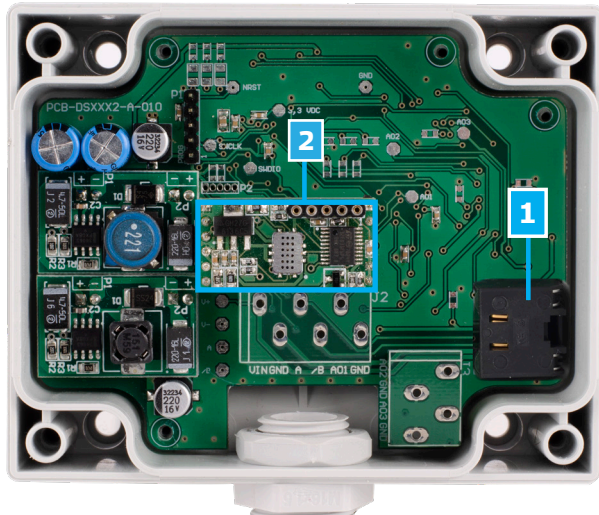
*CO / NO measurement will return 0 ppb during warm-up time.

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Settings



1 - RJ45 Socket



To connect supply voltage and Modbus communication

2 - CO / NO₂ sensor element

Replaceable in case of faulty operation. This CO / NO₂ trend sensor is intended to control ventilation systems in HVAC applications. It detects changes in concentration of carbon monoxide, Nitrogen dioxide, Ethanol, Hydrogen, Ammonia and Methane.

Modbus registers



The Sensstant Modbus configurator allows you to easily monitor and/or configure Modbus parameters.

The parameters of the unit can be monitored/ configured through the 3SMobus software platform. You can download it from the following link:

<https://www.sentera.eu/en/3SMCenter>

For more information about the Modbus registers, please refer to the product Modbus Register Map.

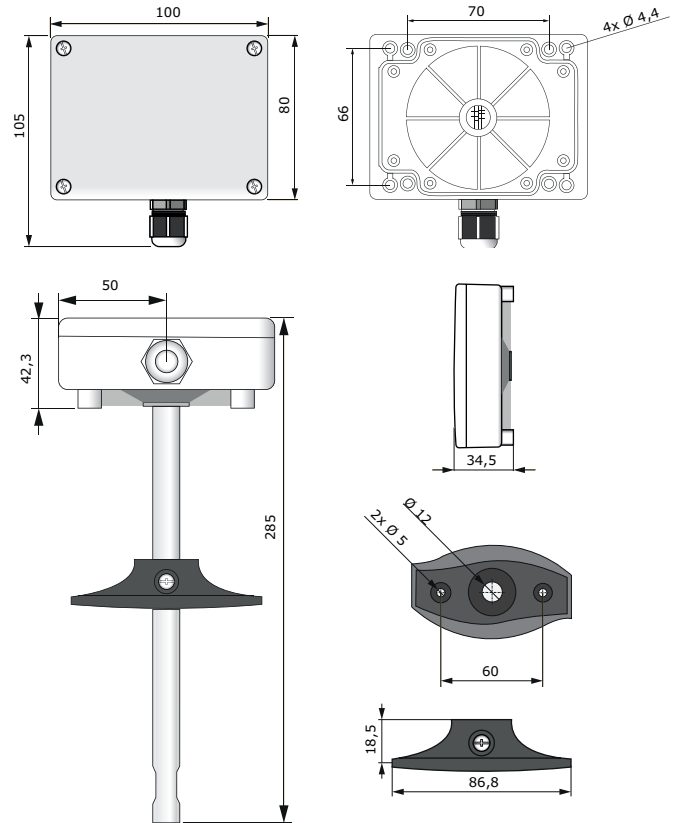
Standards



- EMC Directive 2014/30/EC:
 - EN 61000-6-1:2007 Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments
 - EN 61000-6-3:2007 Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments Amendments A1:2011 and AC:2012 to EN 61000-6-3
 - EN 61326-1:2013 Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements
 - EN 61326-2-3:2013 Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-3: Particular requirements - Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning

- RoHS Directive 2011/65/EC

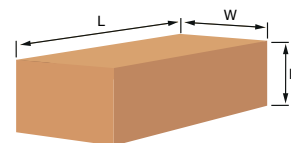
Fixing and dimensions



Global trade item numbers (GTIN)

Packaging	DSCOM-R
Unit	05401003001905
Box	05401003500682

Packaging



Article	Packaging	Length [mm]	Width [mm]	Height [mm]	Net weight	Gross weight
DSCOM-R	Unit (1 pc.)	310	115	115	0,16 kg	0,24 kg
	Box (20 pcs.)	590	380	505	3,20 kg	6,03 kg