

OPC-S1, Operation terminal for active sensors

Features

- Display sensor values according to real values not voltage signals
- Access to programmable configuration parameters
- Display of actual voltage or current outputs on vertical bar
- Available in various designs and materials.
- Surface mounting or hand held

Functions

- Configuration and operation of active sensors controllers
- Remote supervision (communication distance over 50 m)

Ordering

Item Name	Item Code	Description/Option
OPC-S	40-50 0029	Built in display & programming module

Products that work with OPC-S

Item Name	Item Code	Description/Option
SDC-T1-08	40-30 0056	Duct temperature transmitter: probe length 77 mm (3")
SDC-T1-16	40-30 0057	Duct temperature transmitter: probe length 157 mm (6.2")
SDC-T1-24	40-30 0078	Duct temperature transmitter: probe length 237 mm (9.3")
SDC-H1-08	40-30 0060	Duct humidity transmitter: probe length 77mm (3")
SDC-H1-16	40-30 0061	Duct humidity transmitter: probe length 157mm (6.2")
SDC-H1T1-08	40-30 0064	Duct humidity and temperature transmitter: probe length 77mm (3")
SDC-H1T1-16	40-30 0065	Duct humidity and temperature transmitter: probe length 157mm (6.2")
SDC-H1T-08	40-30 0068	Duct humidity transmitter with temp sensor: probe length 77mm (3")
SDC-H1T-16	40-30 0069	Duct humidity transmitter with temp sensor: probe length 157mm (6.2")
SOC-T1	40-30 0059	Outdoor temperature transmitter
SOC-H1	40-30 0063	Outdoor humidity transmitter
SOC-H1T1	40-30 0067	Outdoor humidity & temperature transmitter
SOC-H1T	40-30 0071	Outdoor humidity transmitter with temperature probe

Error messages

The OPC-S may display the following error conditions:

Err1: Communication Error. Verify wiring. Make sure data lines are not mixed up or interrupted. Make sure the wire used is according to standards (See below) and no strong interference is present if unshielded cables are used.

Err2: Faulty temperature sensor. The temperature sensor may be damaged or not present.

Connection to Sensors

1. Turn the single screw on the cover counterclockwise and remove cover.
2. Plug in the white ribbon cable to the long plug on the left hand side
3. Close the OPC-S cover and turn single screw on the cover clockwise

Operation of the OPC-S1

Standard Display:

Single input transmitters: The current, minimum or maximum value is shown in the large digits. The small digits indicate the active input. (IN 1). The vertical bar on the right side indicates the actual output voltage or current in 10% steps.

Combination transmitters: The idle display mode is active if no key has been pressed during the previous 30 seconds. The current temperature (IN 1) is displayed in the large digits and the humidity or pressure (IN 2) is displayed in the small digits. Pressing the RIGHT key will step through available sensor inputs. Indicating the current, minimum or maximum value in the large digits and indication of input number in the small digits and the output signal in the vertical bar.

Indication and reset of minimum and maximum values

Activate the desired transmitter for dual transmitter by pressing the RIGHT key. Press UP to display Maximum values, press DOWN key to display minimum values.

Resetting minimum or maximum values: Pressing either UP or DOWN keys for longer than 3 seconds while the minimum or maximum values are displayed.

Configuration parameters

The SDC and SOC *intelligent* sensors can be adapted to fit perfect into your application. The preparation of the sensing signal is defined by parameters.

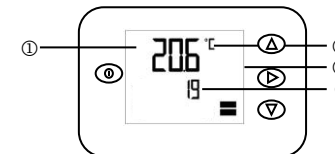
The parameters are password protected. The parameters can be changed as follows:

1. Press UP and DOWN key simultaneously for three seconds. The display will indicate CODE.
2. Select a password using UP or DOWN keys. Dial **09** in order to get access to the configuration parameters. Press the RIGHT key after selecting the correct password.
3. Once logged in, choose IP for input configuration or OP for output configuration using UP or DOWN. Press the RIGHT key after selection.
4. The parameters are now displayed. The small digits show the parameter number, the large one its value.
5. Select the parameters with the UP/DOWN keys. Change a parameter by pressing the RIGHT key. The MIN and MAX symbols show up and indicate that the parameter may be modified now. Use UP and DOWN key to adjust the value.
6. After you are done, press RIGHT or LEFT key in order to return to the parameter selection level.
7. Press the LEFT key again so as to leave the menu. The unit will return to normal operation if no key is pressed for more than 5 minutes.
8. The parameters and its values depend on the transmitter. Please use the respective datasheet for the list of parameters

Technical Specification

Power Supply	Operating Voltage	5 V DC 5%
	Power Consumption	Max 0.2 VA
Display (LCD)	Actual values and setpoint	4 digits
	Resolution value < 1000 Resolution value > 1000 Digital Signals	0.1 1 ON, OFF
Environment	Ambient Temperature	-10 to 50°C acc IEC 721-3-3 (14 to 122 °F)
	Operation	To IEC 721-3-3
	Climatic Conditions	class 3 K5
	Temperature	0...50°C
Standards	Humidity	<95% r.h.
	Transport & Storage	To IEC 721-3-2 and IEC 721-3-1
	Climatic Conditions	class 3 K3 and class 1 K3
	Temperature	-25...70°C
General	Humidity	<95% r.h.
	Mechanical Conditions	class 2M2
	conform according to EMC Standard	89/336/EEC
	EMEI Standard	73/23/EEC
	Product standards	EN 60 730 – 1
	Automatic electrical controls for household and similar use	EN 60 730 – 2 - 9
	Special requirement on temperature dependent controls	
	Electromagnetic compatibility	EN 50 081-1
Standards	Emissions	EN 50 082-1
	Pollution Class	Normal acc. to EN 60 730
	Degree of Protection	IP30 to EN 60 529
	Safety Class	III
	Dimensions (H x W x D)	14 x 91 x 47mm (0.5 x 3.7 x 1.9 in)
General	Housing Material	Fire proof ABS plastic (UL94 class V-0)
	Weight (including package)	80 g

Display and Keys



Legend:

- 1: 4-digit display of current value, Minimum, Maximum or control parameter
- 2: Unit of displayed value, °C, °F, % or none
- 3: Vertical display of output or input signal with a resolution of 10%
- 4: 4-digit display of current value or control parameter

Operation Keys:

- LEFT key:** Exit from parameter menu
- UP key:** Display Maximum values, Press for more than 2 seconds resets Maximum value
- DOWN key:** Display Minimum values, Press for more than 2 seconds resets Minimum value
- RIGHT key:** Select transmitter, For transmitters with more than one input.

Dimensions [mm] (in)

