

OPC-S: Operation and display accessory for intelligent duct and outdoor transmitters

Features

- Display of sensor values and adjustment according to real values not signals.
- Display and reset of minimum and maximum values.
- Password protected programmable configuration parameters
- Available in various designs and materials.

Applications

- Configuration of intelligent transmitters.
- Supervision of critical environments using minimum and maximum memory feature of transmitter.

General Description

The OPC-S is a display and operation terminal for intelligent transmitters of the SDC and SOC series.



Ordering

The OPC-S may be used together with the following transmitters

Item Name	Description/Option
SDC-Series: SDC-T1, SDC-H1, SDC-H1T1, SDC-H1T	Humidity / temperature transmitters for air ducts
SOC-Series: SOC-T1, SOC-H1, SOC-H1T1, SOC-H1T	Outdoor humidity / temperature transmitters

Installation

1. Remove the current cover from the SDC or SOC product by turning the holding screw on the right side of the cover counter clockwise.
2. Open the cover completely and pull it out
3. In the same way insert the OPC-S in the open position.
4. Connect the white ribbon cable to the plug on the center left side of the base part
5. For SOC type of products, make sure the seal is securely in the groove around the inside of the cover, then carefully close the cover and tighten the holding screw clockwise. Use moderate torque.

Setting of 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.

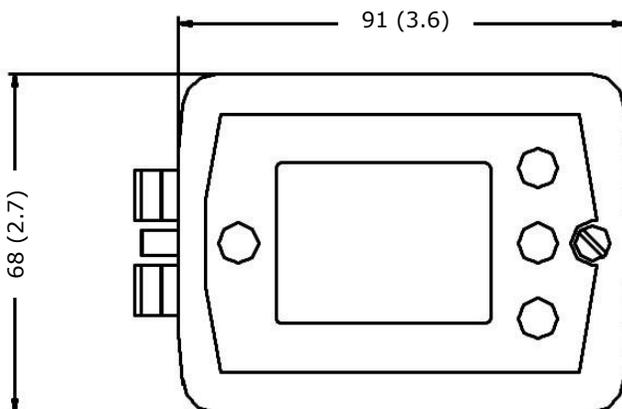
The parameters are password protected. The parameters can be changed as follows:

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 **0009** 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

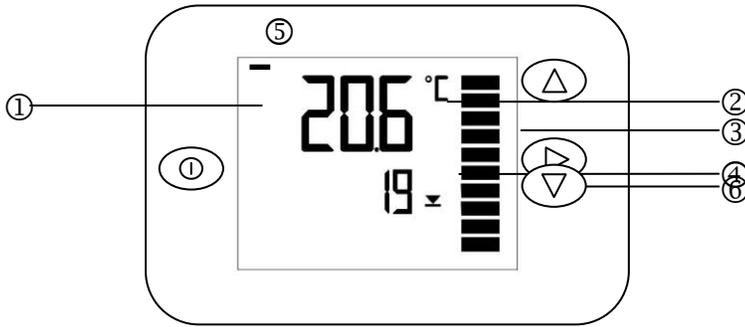
Power Supply	Operating Voltage	5 V DC 5%
	Power Consumption	Max 1 VA
	Electrical Connection	Pre-wired with plug
Communication	Communication Type	VPP (Vector Proprietary Protocol)
	Cable Type Max Distance	Copper wire 4 x 0.8...2.5 mm ² . Unshielded 20 m, Shielded > 50 m
Display (LCD)	Actual values and setpoint Resolution value < 1000 Resolution value > 1000 Digital Signals	4 digits 0.1 1 ON, OFF
Environment	Operation Climatic Conditions Temperature Humidity	To IEC 721-3-3 class 3 K5 0...50 °C (32...122 °F) <95 % r.H. non-condensing
	Transport & Storage Climatic Conditions Temperature Humidity Mechanical Conditions	To IEC 721-3-2 and IEC 721-3-1 class 3 K3 and class 1 K3 -25...70 °C (-13...158 °F) <95 % r.H. non-condensing class 2M2
Communication	Communication Type	VPP (Vector Proprietary Protocol)
Standards	 conform according to EMC Standard 89/336/EEC EMEI Standard 73/23/EEC	EN 61 000-6-1/ EN 61 000-6-3
	Product standards Automatic electrical controls for household and similar use Special requirement on temperature dependent controls	EN 60 730 -1 EN 60 730 - 2 - 9
	Degree of Protection	IP30 to EN 60 529
	Safety Class	III
General	Dimensions (H x W x D)	91 x 68 x 15mm (3.7" x 2.7" x 0.6")
	Housing Material	Polycarbonate PC (UL94 class V-0)
	Mounting Plate	Zinc coated steel
	Standard Color	White RAL 9003
	Weight (including package)	130 g (4.6 oz)

Dimensions



Display and Operation

The operation terminal uses an LCD display and four operation buttons.



Legend:

1. 4-digit display of current value, Minimum, Maximum or control parameter
2. Unit of displayed value, °C, °F, % or none
3. Graphical display of output or input signal with a resolution of 10%
4. 4-digit display of current value or control parameter
5. Left bar = display of minimum value
Right bar = display of maximum value

6. Buttons for operating the controller:

- LEFT key: Operation mode (On, Off) Not used
- UP key: Display Maximum values, pressing for more than 2 seconds resets Maximum value
- DOWN key: Display Minimum values, pressing for more than 2 seconds resets Minimum value
- RIGHT key: Select transmitter, For transmitters with more than one input.

Operation of the Terminal Unit

Idle 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.

Error messages

The OPC-S may display the following error condition:

Err1: Communication time out between terminal unit and transmitter. Terminal unit will reset after 10 seconds.

Err2: Temperature sensor faulty. The connection to the temperature sensor may be interrupted or the temperature sensor is damaged. As a consequence the output of this transmitter are switched off.