

## Dew point sensor IFA 500 from -80 to 20°Ctd

IFA 500 is the ideal dew point measuring instrument with integrated display and alarm relay for refrigeration, membrane and desiccant driers.



### Special features:

- Integrated display
- Threshold value adjustable via keypad alarm relay (max. 60 VDC, 0.5 A)
- Pressure-tight up to 350 bar (special version)
- Extreme long-term stability
- Quick response time
- 4...20 mA analogue output
- 2 versions: Refrigeration driers and desiccant driers
- **NEW: Modbus-RTU interface**
- **NEW: Higher resolution of sensor signal caused by the improved evaluation electronics**
- **NEW: Sensor diagnosis on site with a portable device or CS Service Software**

The integrated keys enable an easy menu-driven operation



### Upper connection:

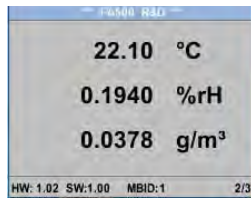
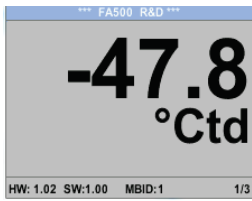
Power supply  
4...20 mA output  
Modbus-RTU output

### Lower connection:

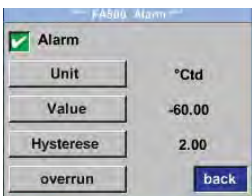
Alarm relay



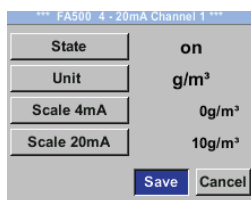
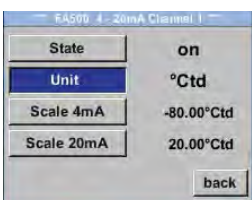
# IFA 500 – easy operation via keys at the display



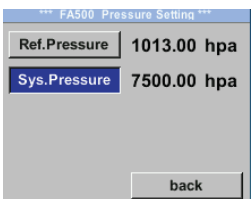
The integrated display shows the dew point in big figures as well as further humidity parameters on two more display pages. By means of the arrow key it can be browsed between the display pages.



The alarm threshold value for the integrated relay can be entered via the keys. Apart from the alarm threshold it is also possible to enter the hysteresis freely.



The 4...20 mA analogue output can be scaled freely resp. also allocated to one further parameter, e. g. g/m<sup>3</sup>.



If requested the sensor can also reckon back from the measured pressure dew point to the atmospheric dew point upon entering the system pressure of the compressed air plant and the reference pressure (atmospheric pressure).

## Technical data IFA 500

<b>Measuring range:</b>	-80...20 °Ctd, -60...30 °Ctd, -20...50 °Ctd, resp. 0...100% RH
<b>Accuracy:</b>	± 1°C bei 20...-20°Ctd ± 2°C bei -20...-50°Ctd ± 3°C bei -50...-80°Ctd
<b>Pressure range:</b>	-1...50 bar special version up to 350 bar
<b>Power supply:</b>	24 VDC (18...30 VDC) smoothed
<b>Protection class:</b>	IP 65
<b>EMV:</b>	according to DIN EN 61326
<b>Operating temp:</b>	-20...50 °C
<b>Connection:</b>	2 x M12, 5-pole for analogue output, Modbus-RTU and alarm output
<b>PC connection:</b>	Modbus-RTU interface (RS 485)
<b>Output (3-wire)</b>	4...20 mA = -80...20°Ctd 4...20 mA = -60...30°Ctd 4...20 mA = -20...50°Ctd
<b>Burden for analogue output:</b>	< 500 Ω
<b>Alarm relay:</b>	NC, max.60 VDC, 0.5 A
<b>Screw-in thread:</b>	G 1/2"
<b>Dimensions of housing</b>	76,5 x 85 x 75 (WxHxD)

Description	Order No.
IFA 500 dew point sensor for refrigeration driers, -20...50 °Ctd	0699 0501
IFA 500 dew point sensor for desiccant driers, -80...20 °Ctd	0699 0502
IFA 500 dew point sensor, -60...30 °Ctd	0699 0503
<b>Connection cables:</b>	
Connection cable, 5 m	0553 0104
Connection cable, 10 m	0553 0105
Alarm cable, length: 5 m	0553 0106
Alarm cable, length: 10 m	0553 0107
<b>Options for IFA 500:</b>	
Option max. pressure IFA5xx 350 bar	Z699 0515
Option max. pressure IFA5xx 500 bar	Z699 0516
Option special scaling IFA5xx 4...20 mA= ___ ... ___ g/m <sup>3</sup> , ppm etc.	Z699 0514
Option connection thread IFA5xx, 5/8" UNF	Z699 0511
Option connection thread IFA5xx, 1/2" NPT	Z699 0512
Option surface condition IFA5xx, free of oil & grease	Z699 0517
<b>Additional accessories:</b>	
Standard measuring chamber up to 16 bar	0699 3390
High pressure measuring chamber up to 350 bar	0699 3590
CS Service Software for IFA/IVA sensors incl. PC connection set, USB connection and interface adapter to the sensor	0554 2007
Mains unit in wall housing 100-240 V, 10 VA, 50-60 Hz/24 VDC, 0.35 A	0554 0108
AC adapter plug 100-240 V AC/ 24 V for IVA/IFA 500/520	0554 0109
<b>Calibration:</b>	
Precision calibration at -40°Ctd or +3°Ctd including ISO certificate	0699 3396