

Dew point sensor FA 500 from -80 to 20°Ctd

FA 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

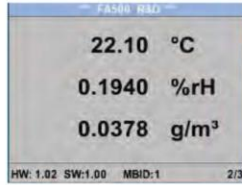
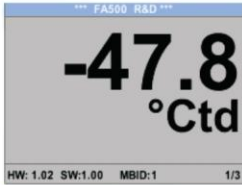
Lower connection:

Alarm relay





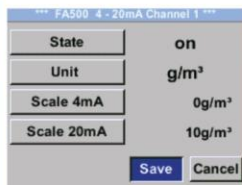
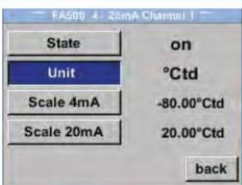
FA 500 – easy operation via keys at the display



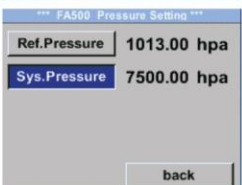
The integrated display shows the dew point in big figures as well as further humidity parameters on two more display pages. By means of the arrow key it can be browsed between the display pages.



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/m³.



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).

Description	
FA 500 dew point sensor for refrigeration driers, -20...50 °Ctd	
FA 500 dew point sensor for desiccant driers, -80...20 °Ctd	
FA 500 dew point sensor for desiccant driers, -60...30 °Ctd	
Connection cables:	
Connection cable, 5 m	
Connection cable, 10 m	
Alarm cable, length: 5 m	
Alarm cable, length: 10 m	
Options for FA 500:	
Option max. pressure FA5xx 350 bar	
Option max. pressure FA5xx 500 bar	
Option special scaling FA5xx 4...20 mA= ___ ... ___ g/m ³ , ppm etc.	
Option connection thread FA5xx, 5/8" UNF	
Option connection thread FA5xx, 1/2" NPT	
Option surface condition FA5xx, free of oil & grease	
M-Bus board for VA500/520 and FA500	
Additional accessories:	
Standard measuring chamber up to 16 bar	
High pressure measuring chamber up to 350 bar	
CS Service Software for FA/VA sensors incl. PC connection set, USB connection and interface adapter to the sensor	
Mains unit in wall housing for maximum 2 sensors of the series VA/FA 5xx, 100-240 V, 23 VA, 50-60 Hz / 24 VDC, 0.35 A	
AC adapter plug 100-240 V AC/ 24 V for VA/FA 500/520	
Calibration:	
Precision calibration at -40°Ctd or +3°Ctd including ISO certificate	

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