

DATASHEET

Dew point measuring device [TPK21 LT](#)





Completely ready-to-connect pressure dew point measuring device, with integrated measuring chamber incl. mains cable

The **TPK 21 LT** pressure dew point monitor is used as a transmitter with display for fast and uncomplicated humidity and dew point humidity and dew point measurement, as well as for temperature monitoring and provides a freely configurable output signal 4...20 mA or 0..10 V.

Two independent potential-free contacts are provided for pre-alarm or main alarm, e.g. for the dew point, for example.

The **TPK 21 LT** is equipped with adjustable alarm management as standard.

The visual and audible alarms can be easily displayed using the optional flashing light with acknowledgeable buzzer via a standard cable connection with M 12 plug.

The sophisticated software makes it easy to simulate measured values. Likewise "RELAY TEST" as well as a 'RESET' to factory settings is possible at any time via the display. This makes commissioning and a function test extremely easy and saves the service technician valuable time on site. valuable time on site.

Due to the permanently integrated measuring chamber, the measuring device can either be integrated directly into the piping system via a standard NW 7.2 compressed air coupling or using an optional PTFE hose.

All signals are provided internally and can be easily tapped via the M12 connectors integrated in the device and the optionally available cables.

As the high-quality polymer sensor is auto-calibrated every 13 hours as standard (can be switched off), measurement errors due to excessive moisture or dirt ingress are reduced to a minimum.

With the **TPK 21 LT**, you get pressure dew point monitoring of the highest precision, the latest technology and unique features that are unparalleled on the market.



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Technical data:

calibrated measuring range:	-20...+20°Ctp	
Pressure range:	0 ... 16 bar	
Measuring medium:	clean, oil-free compressed air, free from aggressive, corrosive, corrosive, toxic, flammable and oxidizing components	
Output / display values:	Pressure dew point	°C, °F
	Gas temperature	°C, °F
	relative humidity	% r.H., %r.H.
Sensor element humidity:	capacitive polymer sensor	
Analog output (active):	4...20 mA or 0...10 V	
	(current or voltage signal adjustable) Output freely configurable	
2 alarm thresholds:	pre-alarm and main alarm, adjustable	
2 x relay output:	isolated, adjustable (nc, no, ac, ao) (DC/AC 40V/100mA)	
	Switching polarity adjustable via menu Upper and lower limit value adjustable for each relay channel	
Accuracy:	± 1 K dtp (bei 0....+20°C tpd)	
Power supply:	230V AC / max 20VA (power supply unit included)	
	(device: 24 V DC/5W ± 5%)	



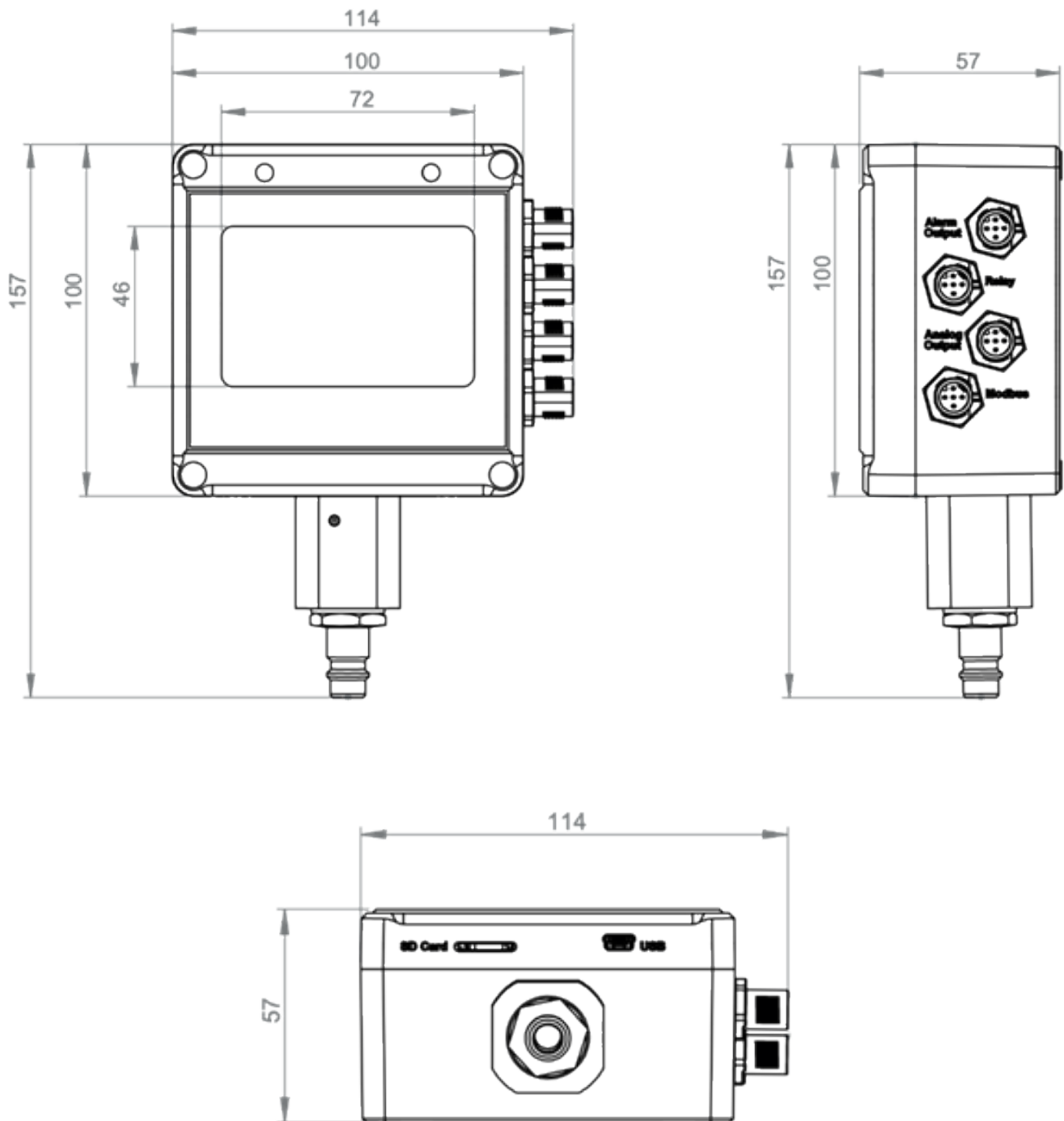
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Technical data:

Operating temperature:	-20°C ... 50°C (sensor head)
Sample gas temperature:	-20°C ... 50°C
Protection class:	Housing and plug IP 54
Mechanical connection:	3/8" female thread, supplied with plug for quick-release coupling, SW 27
Electrical connection:	M12 plug
Measuring chamber material: (wetted parts)	Stainless steel 1.4404
Flushing loss via measuring chamber:	60 l/h
Display:	LCD, monochrome, touchscreen
Dimensions:	160 x 101 x 59 mm (h x w x d)
Weight:	approx. 600 g (without power supply unit)
Housing material:	ABS plastic
Languages:	German, English, French adjustable via display

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Dimensions:





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optional accessories:

Sensor/actuator cable, 5-pin, PUR halogen-free, black-grey RAL 7021

one side straight M 12 socket, other side free cable end - length 3.0 m
one side straight M 12 socket, other side free cable end - length 10.0 m



Sensor/actuator cable, 5-pin, PUR halogen-free, black-grey RAL 7021

one side straight M 12 socket, other side straight M 12 coupling - length 3 m
one side straight M 12 socket, other side straight M 12 coupling - length 10.0 m



Indicator light with acoustic signal transmitter with acknowledgement button

For all dew point measuring devices of the TPK series, yellow flashing light loud piezo signaling device, with wall bracket, 10 m fixed connection cable connected with 5-pin M 12 plug, A-coded



External relay box for potential-free relays

Relay box with 4 relays, for controlling power consumers, 4 relays 8A/230V with changeover contact. Supplied with power supply unit.

The TPK series has potential-free 30 V outputs. Should external units (e.g. electric ball valve) with a voltage supply of power supply of 220 V via the dew point measuring device dew point meter, this relay box must be used, which transforms the potential-free output into the correct voltage



Stylos pin

Suitable for TPK series (1 pin included as standard)
Replacement stylos for easier operation of the display

