VAISALA

Indigo300 Transmitter
For Vaisala Indigo-compatible probes

Vaisala Indigo300 Transmitter is a host device for displaying measurement values from Vaisala Indigo-compatible probes and/or transmitting them to automation systems through analog signals.

Transmitter for Vaisala Indigo-compatible probes

- HMP series humidity and temperature probes
- TMP1 temperature probe
- DMP series dew point probes
- GMP250 series carbon dioxide probes
- HPP270 series vaporized hydrogen peroxide probes
- MMP8 moisture in oil probe

The Indigo300 transmitter is a plug-and-play host device for the current and future Vaisala Indigo-compatible probes. The transmitter has a numerical and graphical color display with push-button navigation for up to 3 measurement parameters.

Simple to connect and service

Probes can be connected to the transmitter tool-free using the locking wheel. You can connect a probe to the locking wheel directly or by using a cable. Instead of the locking wheel, it is also possible to use a cable gland with a fixed cable.

The service port on the front can be opened with a 4-mm Allen key for enabling access to the free Vaisala Insight PC software or Indigo80 handheld indicator.

With Insight and Indigo80, you can configure both the transmitter and the probe connected to it, as well as calibrate and adjust the probe without having to detach it from the transmitter.

Robust design

The IP65-rated, corrosion-resistant metal housing of the transmitter is suitable for harsh conditions.

Versatile installation options

The mounting options include mounting through the transmitter body and mounting on a DIN rail. With an adapter plate, the transmitter can be installed to replace an HMT330, DMT340, and MMT330 series transmitter.

The transmitter can either be wired from the back, which leaves no trailing cables, or through the bottom lead-throughs.

For more information on the Indigo300 transmitter and the Indigo product family, see http://www.vaisala.com/indigo.

Technical data

Indigo-compatible probes

Measurement type	Probe models
Humidity and temperature	HMP1, HMP3, HMP4, HMP5, HMP7, HMP8, HMP9
Temperature	TMP1
Dew point	DMP5, DMP6, DMP7, DMP8
Carbon dioxide	GMP251, GMP252
Vaporized hydrogen peroxide	HPP271, HPP272
Moisture in oil	MMP8

Operating environment

Operating temperature	−20 ... +60 °C (−4 ...+140 °F)
Storage temperature	−30 ... +70 °C (−22 ...+158 °F)
Operating humidity	0 ... 100 %RH
Maximum operating altitude	5000 m (approx. 16 400 ft)
IP rating	IP65

Note: Protect the device from direct sunlight.

Inputs and outputs

Power supply input	15 ... 30 V DC [1] 24 V AC ±10 % 50/60 Hz
Fuse size for power supply	2.5 A
Transmitter service port connection	• Connection to Insight with USB2 and cable 262195 [2] • Connection to Indigo80 with cable 262195

Analog outputs	Current or voltage
Number of analog outputs	3
Selectable voltage output types	0 ... 1 V, 0 ... 5 V, 0 ... 10 V, 1 ... 5 V, scalable, $R_L \geq 10$ kΩ
Selectable current output types	4 ... 20 mA, 0 ... 20 mA, scalable, $R_L \leq 500$ Ω
Accuracy of analog outputs at 20 °C (+68 °F)	±0.1 % full scale [3]
Temperature dependence	±0.005 % / °C full scale

Current consumption at 20 °C (+68 °F) (U_{in} 24 V DC)	
Minimum consumption with display off, no analog outputs active, no probe connected [4]	13 mA
Minimum consumption with display on, brightness normal mode	31 mA
U_{out} 0 ... 1 V, 0 ... 5 V, 0 ... 10 V, 1 ... 5 V	Max. + 1.8 mA per connected channel
I_{out} 4 ... 20 mA, 0 ... 20 mA	Max. + 12.3 mA per connected channel

1) When used with the HMP7 probe, the minimum required power supply input is 18 V DC.
2) Vaisala Insight software for Windows® available at http://www.vaisala.com/insight.
3) For the voltage outputs, small variation is possible around true zero.
4) For the current consumption of the connected probe, see the probe's user documentation.

Compliance

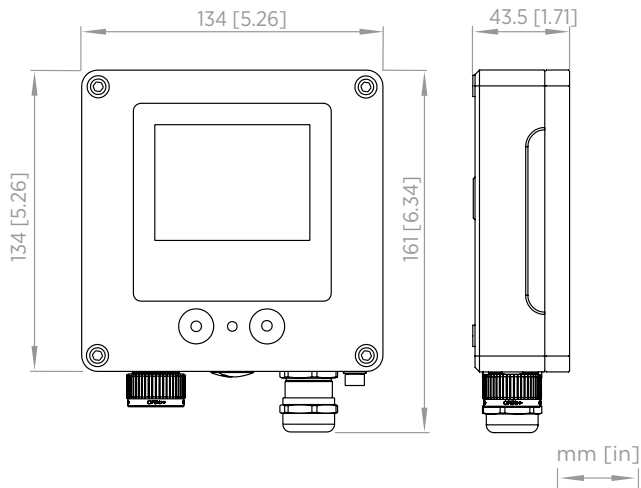|	
EU directives and regulations	EMC Directive (2014/30/EU) RoHS Directive (2011/65/EU) amended by 2015/863
EMC compatibility	EN IEC 61326-1, industrial environment
EMC emissions	CISPR 32 / EN 55032, Class A FCC part 15 B, Class A ICES-3 / NMB-3 (Class A)
Compliance marks	CE, China RoHS, FCC, RCM, UKCA

Mechanical specifications

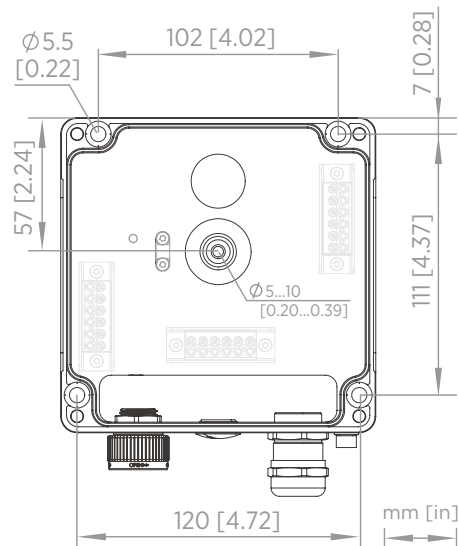|	
Housing material	EN AW-6082
Connection screw terminals	Max. 1.5 mm^2 wire (16 AWG)
Cable lead-throughs for output and power cables	• M20×1.5 cable gland / conduit fitting NPT 1/2″ • M16×1.5 cable gland / conduit fitting NPT 1/2″
Cable diameter for M20×1.5 gland	7 ... 13 mm (0.26 ... 0.51 in)
Cable diameter for M16×1.5 gland	2 ... 6 mm (0.08 ... 0.24 in)
Dimensions	161 × 134 × 43.5 mm (6.34 × 5.26 × 1.71 in)
Weight	1200 g (2.65 lb)

Probe connection cables

Cables for use with locking wheel	
Probe connection cable, 1 m (3 ft 3 in)	INDIGOCABLE1M
Probe connection cable, H_2O_2 compatible, 1 m (3 ft 3 in)	INDIGOCABLEHD1M5
Probe connection cable, 3 m (9 ft 11 in)	INDIGOCABLE3M
Probe connection cable, H_2O_2 compatible, 3 m (9 ft 11 in)	INDIGOCABLEHD3M
Probe connection cable, 5 m (16 ft 5 in)	INDIGOCABLE5M
Probe connection cable, H_2O_2 compatible, 5 m (16 ft 5 in)	INDIGOCABLEHD5M
Probe connection cable, 10 m (32 ft 10 in)	INDIGOCABLE10M
Probe connection cable, H_2O_2 compatible, 10 m (32 ft 10 in)	INDIGOCABLEHD10M
Fixed cables for use with cable gland	
Probe connection cable, 0.3 m (12 in), open end	CBL210896-03MSP
Probe connection cable, 1 m (3 ft 3 in), open end	CBL210896-1MSP
Probe connection cable, 3 m (9 ft 11 in), open end	CBL210896-3MSP
Probe connection cable, 5 m (16 ft 5 in), open end	CBL210896-5MSP
Probe connection cable, 10 m (32 ft 10 in), open end	CBL210896-10MSP

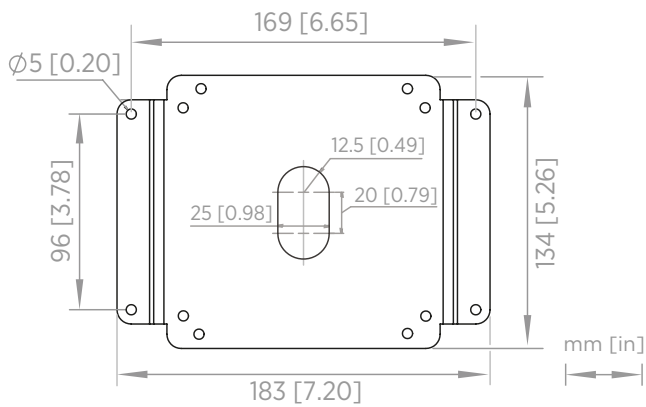## Spare parts and accessories

Adapter plate for replacing a Vaisala 330 series transmitter	DRW257715SP
DIN rail installation kit	ASM215071SP
Vaisala Indigo USB adapter and M12 - M8 service cable, for connecting to Insight	USB2 and 262195SP
M12 - M8 service cable 1.5 m (4.9 ft), for connecting to Indigo80	262195SP
Cable gland M20×1.5 for 7.0 ... 13.0 mm (0.26 ... 0.51 in) cable	253993SP
Conduit fitting M20×1.5 for NPT1/2″ conduit	214780SP
Cable gland M16×1.5 for 2.0 ... 6.0 mm (0.08 ... 0.24 in) cable	ASM213671SP
Conduit fitting M16×1.5 for NPT1/2″ conduit	210675SP
Plug for M20 lead-through	ASM213672SP
Plug for M16 lead-through	210369SP
Service port plug	DRW257660SP

Indigo300 transmitter dimensions

Indigo300 transmitter body mounting dimensions

Indigo300 adapter plate (DRW257715SP) mounting dimensions