

## Indigo300 Transmitter

For Vaisala Indigo-compatible probes



### Features

- Numerical and graphical color display for up to 3 parameters
- Non-display version with an LED status indicator also available
- IP66-rated metal housing
- Support for one Indigo-compatible probe
- Tool-free locking wheel for the probe
- 24 V AC/DC power supply input
- 3 preconfigured analog outputs (mA or V)
- Service port for connecting to Vaisala Insight PC software or Indigo80 handheld indicator

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 current and future Vaisala Indigo-compatible probes. The transmitter has a numerical and graphical color display showing up to 3 measurement parameters simultaneously.

A non-display transmitter version with an LED status indicator is also available.

### Simple to connect and service

Probes can be connected to the transmitter tool-free using the locking wheel of the probe connector. You can connect a probe directly or by using a cable. Instead of the locking wheel and a detachable cable, 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 access to the free Vaisala Insight PC software or Indigo80 handheld indicator.

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

### Robust design

The IP66-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, or 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 [www.vaisala.com/indigo](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	With display: -20 ... +60 °C (-4 ... +140 °F) Without display: -40 ... +60 °C (-40 ... +140 °F)
Storage temperature	With display: -30 ... +70 °C (-22 ... +158 °F) Without display: -40 ... +70 °C (-40 ... +158 °F)
Operating humidity	0-100 %RH
Maximum operating altitude	5000 m (approx. 16 400 ft)
IP rating	IP66 <sup>1)</sup>

<sup>1)</sup> IP40 for transmitters equipped with a locking wheel and a probe connection cable attached to it. This combination is recommended only for indoor conditions.

## Inputs and outputs

Power supply input	15-30 V DC <sup>1)</sup> 24 V AC ±10 % 50/60 Hz
Fuse size for power supply	2.5 A
Transmitter service port connection	<ul style="list-style-type: none"> <li>Connection to Insight with USB2 and cable 262195SP <sup>2)</sup></li> <li>Connection to Indigo80 with cable 262195SP</li> </ul>
<b>Analog outputs</b>	Current or voltage
Number of analog outputs	3
Isolation	Not galvanically isolated
Selectable voltage output types	0-1 V, 0-5 V, 0-10 V, 1-5 V, scalable, $R_L \geq 10 \text{ k}\Omega$
Selectable current output types	4-20 mA, 0-20 mA, scalable, $R_L \leq 500 \Omega$
Accuracy of analog outputs at 20 °C (+68 °F)	±0.1 % full scale <sup>3)</sup>
Temperature dependence	±0.005 % / °C full scale
<b>Current consumption at 20 °C (+68 °F) (<math>U_{in}</math> 24 V DC)</b>	
Minimum consumption with display off, no analog outputs active, no probe connected <sup>4)</sup>	13 mA
Minimum consumption with display on, brightness normal mode, no analog outputs active, no probe connected	18 mA
$U_{out}$ 0-1 V, 0-5 V, 0-10 V, 1-5 V	+ 1.8 mA per connected channel at maximum load
$I_{out}$ 4-20 mA, 0-20 mA	+ 12.3 mA max. per connected channel

<sup>1)</sup> When used with the HMP7 probe, the minimum required power supply input is 18 V DC.

<sup>2)</sup> Vaisala Insight software for Windows® available at [vaisala.com/insight](https://www.vaisala.com/insight).

<sup>3)</sup> For the voltage outputs, small variation is possible around true zero.

<sup>4)</sup> For the current consumption of the connected probe, see the probe's user documentation at [docs.vaisala.com](https://docs.vaisala.com).

## Compliance

EU directives and regulations	EMC Directive (2014/30/EU) RoHS Directive (2011/65/EU) as amended by 2015/863
Electromagnetic compatibility (EMC)	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, KC, RCM, UKCA

## Mechanical specifications

Housing material	EN AW-6082
Connection screw terminals	Max. 1.5 mm <sup>2</sup> wire (16 AWG)
Cable lead-throughs for output and power cables	<ul style="list-style-type: none"> <li>M20×1.5 cable gland / conduit fitting NPT 1/2"</li> <li>M16×1.5 cable gland / conduit fitting NPT 1/2"</li> </ul>
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

<b>Detachable cables for use with locking wheel <sup>1)</sup></b>	
Probe connection cable, 1 m (3 ft 3 in)	INDIGOCABLE1M
Probe connection cable, H <sub>2</sub> O <sub>2</sub> compatible, 1 m (3 ft 3 in)	INDIGOCABLEHDM5
Probe connection cable, 3 m (9 ft 11 in)	INDIGOCABLE3M
Probe connection cable, H <sub>2</sub> O <sub>2</sub> compatible, 3 m (9 ft 11 in)	INDIGOCABLEHDM3M
Probe connection cable, 5 m (16 ft 5 in)	INDIGOCABLE5M
Probe connection cable, H <sub>2</sub> O <sub>2</sub> compatible, 5 m (16 ft 5 in)	INDIGOCABLEHDM5M
Probe connection cable, 10 m (32 ft 10 in)	INDIGOCABLE10M
Probe connection cable, H <sub>2</sub> O <sub>2</sub> compatible, 10 m (32 ft 10 in)	INDIGOCABLEHDM10M
<b>Fixed cables for use with cable gland <sup>2)</sup></b>	
Probe connection cable, 0.3 m (12 in), open end <sup>3)</sup>	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

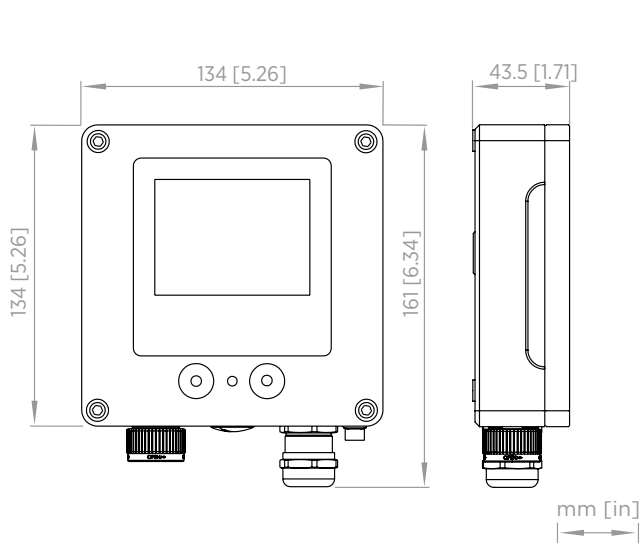
<sup>1)</sup> The IP rating of transmitters that use detachable probe connection cables with the locking wheel is IP40.

<sup>2)</sup> The IP rating of transmitters that use fixed probe connection cables with the cable gland is IP66.

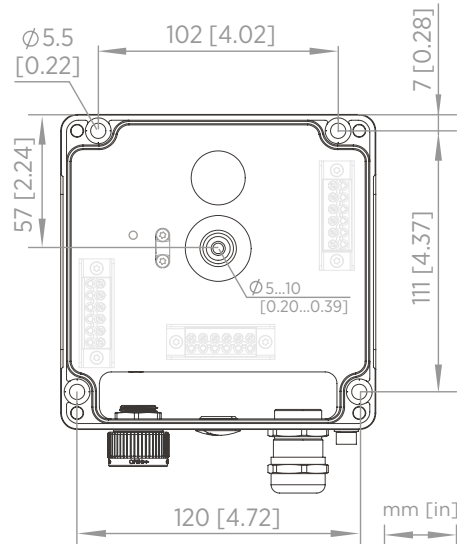
<sup>3)</sup> The usable length outside of the transmitter enclosure is approx. 0.1 m (4 in) shorter than the total length of the cable.

## Spare parts and accessories

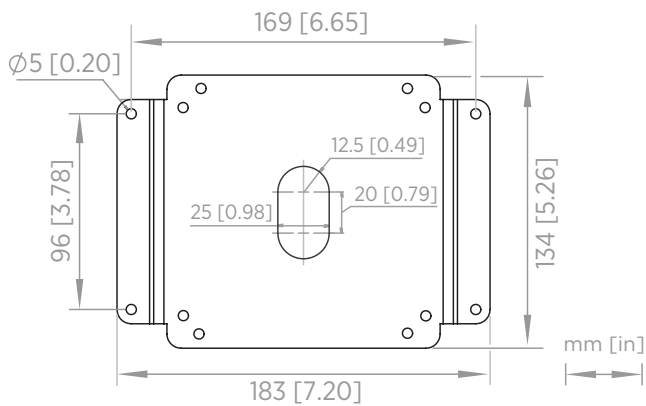
Adapter plate for replacing a Vaisala 330 series transmitter	DRW257715SP
DIN rail installation kit for 35 mm (0.11 in) wide DIN rail	ASM215071SP
Vaisala Indigo USB adapter and M12 - M8 service cable, for connecting to Insight	USB2 and 262195SP
M12 - M8 service cable 1.5 m (4.9 ft), for connecting to 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

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