

## IAC 500 – Measures ambient conditions in the room – Absolute pressure, room temperature, humidity

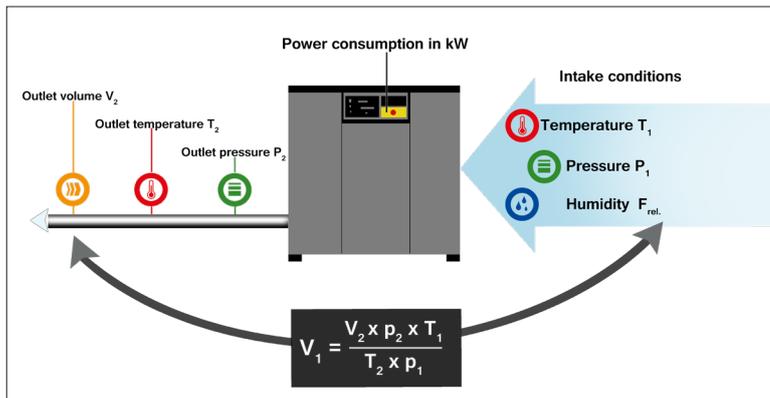


### Special features:

- 3 in 1 sensor: absolute pressure, temperature and humidity in the room
- Modbus-RTU, Ethernet or M-Bus interface
- Alarm relay – limit value adjustable via buttons (max 60 VDC, 0.5 A)
- Optional: 2 x 4...20 mA analogue outputs, 2 x alarm relays, e.g., for dew point and temperature

### Application:

- Monitoring the intake air of compressed air stations
- Monitoring of room air e.g. cold rooms, storage rooms or clean rooms



The delivery rate of compressors depends on the intake air.

The installation site and the climatic conditions must already be taken into account when designing compressed air stations.

Large temperature fluctuations, e.g. between day and night, lead to uneven compressed air flow.

### Example order code IAC 500:

0604 1000\_A1

Signal output option	
A1	1 x 4...20 mA analogue output (galvanically not isolated), alarm relay, RS 485 (Modbus-RTU)
A2	2 x 4...20 mA analogue output (galvanically not isolated), 2 x alarm relays, RS 485 (Modbus-RTU)
A3	Ethernet interface (Modbus/TCP), 1 x 4...20 mA analogue output (galvanically not isolated), RS 485 (Modbus-RTU)
A4	Ethernet interface PoE (Power over Ethernet) (Modbus/TCP), 1 x 4...20 mA analogue output (galvanically not isolated), RS 485 (Modbus-RTU)
A5	M-Bus, 1 x 4...20 mA analogue output (galvanically not isolated), alarm relay, RS 485 (Modbus-RTU)

DESCRIPTION	ORDER NO.
IAC 500 sensor for measuring ambient conditions (absolute pressure, temperature, rel. humidity), incl. wall bracket	0604 1000
<b>Further accessories:</b>	
Connection cable for probes 5 m with open ends	0553 0104
Connection cable for probes 10 m with open ends	0553 0105
Ethernet connection cable length 5 m, M12 plug x-coded (8 pin) to RJ 45 plug	0553 2503
Ethernet connection cable length 10 m, M12 plug x-coded (8 pin) to RJ 45 plug	0553 2504

### TECHNICAL DATA of IAC 500

<b>Temperature</b>	
<b>Measuring range:</b>	-20...+60°C,
<b>Accuracy:</b>	± 1.0 K (0...60°C) ± 1.25 K (-20...0°C)
<b>Rel. humidity</b>	
<b>Measuring range:</b>	5...95% rF
<b>Accuracy:</b>	± 3%
<b>Absolute pressure</b>	
<b>measuring range:</b>	300...1100 hPa (abs)
<b>Accuracy</b>	±4 hPa
<b>Voltage supply:</b>	24 VDC (18...30 VDC via SELV supply) or Power over Ethernet (IEEE802.3af: Class 2 (3.84W - 6.49W))
<b>Protection class of housing:</b>	IP 65
<b>Operating temperature:</b>	-20...+60°C
<b>Ambient temperature:</b>	-20...+60°C
<b>Storage temperature:</b>	-40...+80°C
<b>Readable via Modbus:</b>	Absolute pressure [hPa, mbar, bar, psi,...], dew point [°Ctd, °Ftd], temperature [°C, °F], rel. humidity [%RH], abs. humidity [g/m³].