

TECHNICAL DATASHEET

New
CE



Flush-mount multi-channel display ATE 300

- Alternating display of 1 to 3 parameters
- 3 analogue inputs : 3 x 4-20mA or 3 x 0-10V
- 1 RS 232 digital input for KIMO external transmitter (class 200 & 300)
- 1 RS 485 digital input/output (Modbus protocol integrated)
- 22 pre-set units and 3 configurable units
- Configuration via software or remote control
- Electroluminescent front display, made of brushed stainless steel or white lacquered

■ Display features

Display	electroluminescent alphanumeric (38 x 48mm) protection screen made of PMMA
1 st line (measurement)	4 digits x 8 segments - ℓ 14 x ℓ 48 mm
2 nd line (unit)	4 digits x 14 segments - ℓ 14 x ℓ 48 mm
Comma position	configurable 0 / 0,0 / 0,00
Measurement value	from -9,99 to 99,99 and from -999 to 9999
Accuracy	$\pm 0,1$ % of the measurement ± 1 digit
Number of channels	from 1 to 3 channels, alternatively (3 seconds)
Location of channels	with 3 LED: green, orange, red
Units available	22 pre-set units (see chart) 3 configurable units
Response time	< 1 sec.

■ Housing features

Front face	316L wire brushed stainless steelor white lacquered
Back housing	flushmount, 304L stainless steel
Protection factor	IP 65 in front face
Dimensions	see drawing
Weight	600g

■ Technical specifications

Power supply	24 Vac / Vdc ± 10 %
Galvanic isolation	between input and power supply
Analogue inputs	3 x 4-20 mA (4 wires) or 3 x 0-10 V
Consumption	5 VA
Electro-magnetical compatibility	EN 61 326
Electrical connection	screw terminal block for cables $\varnothing 1.5$ mm ² max
RS 485 communication	digital: RTU Modbus protocol communication speed configurable from 2400 to 115200 Bauds
RS 232 communication	digital: ASCII, proprietary protocol
Working temperature	0 to +50°C
Storage temperature	-10 to +70°C
Environment	air and neutral gases

* All accuracies indicated in this technical datasheet were stated in laboratory conditions, and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation.

■ References

Front face

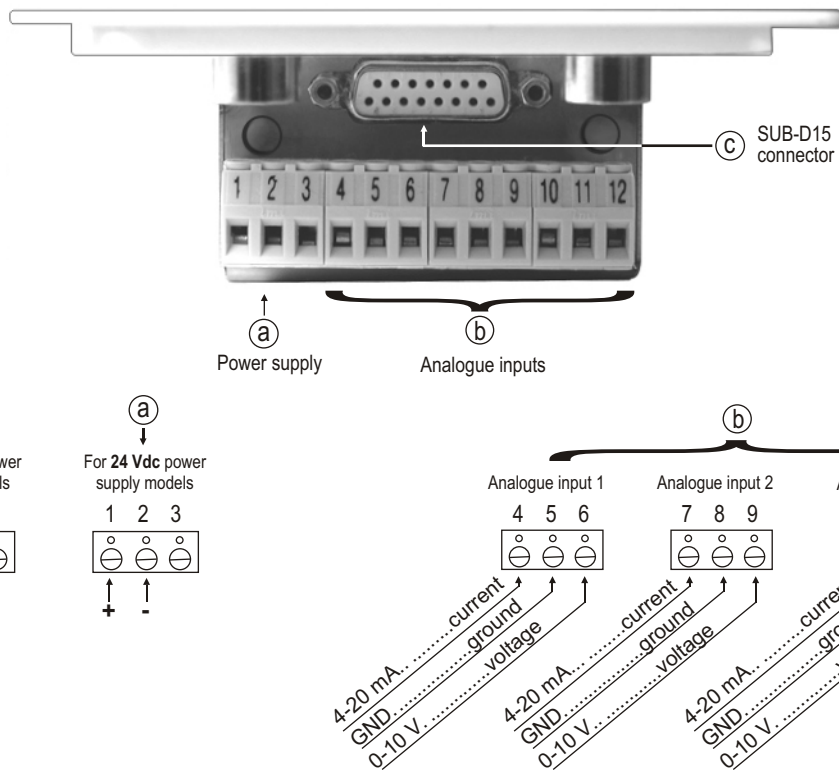
B	White lacquered stainless steel
I	Brushed stainless steel

ATE-300 -

■ Pre-set units

Air velocity	m/s fpm
Airflow	m ³ /h l/s cfm m ³ /s
Temperature	°C °F
Pressure	Pa mmH ₂ O mbar Kpa mmHg inWg PSI
Humidity	%RH g/kg (absolute hygro ρ) °C (dew point Td) °F (dew point Td) °C (humid temp. Tw) °F (humid temp. Tw) KJ/Kg (Enthalpy i)

Connection

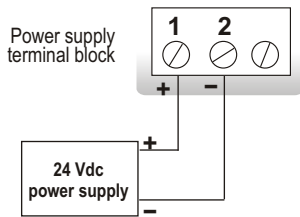


Electrical connections - as per NFC15-100 norm

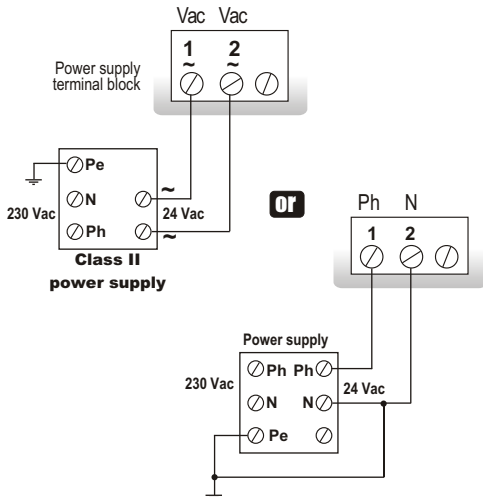
⚠ This connection must be made by a qualified technician. Whilst making the connection, the transmitter must not be energized.

Power supply connection:

- For 24 Vdc power supply models :

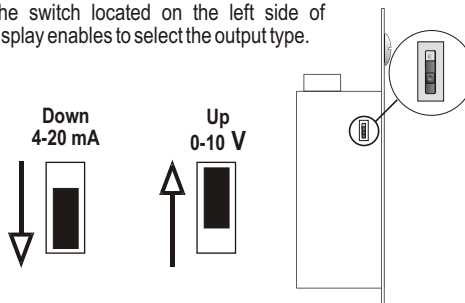


- For 24 Vac power supply models :



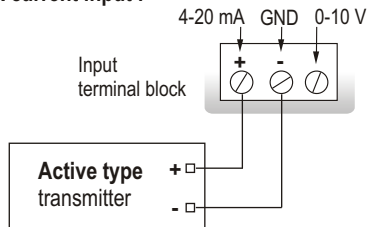
Input signal selection 0-10V voltage or or 4-20mA current

The switch located on the left side of display enables to select the output type.

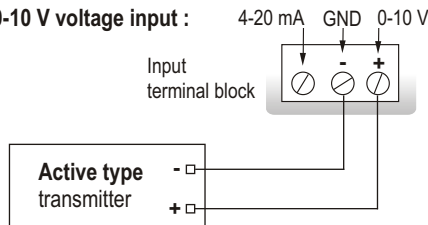


Input connection:

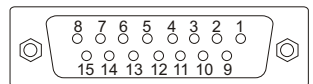
- 4-20 mA current input :



- 0-10 V voltage input :



- SUB-D15 connection**
RS 232 and RS 485
(see © on connection drawing)



Pin #	Description
1	NC *
2	NC *
3	NC *
4	B - (RS485)
5	A + (RS485)
6	NC *
7	NC *
8	NC *
9	RX (RS 232)
10	NC *
11	TX (RS 232)
12	NC *
13	NC *
14	NC *
15	GND (RS 232)

⚠ CAUTION:
NC * --> DO NOT CONNECT

Analogue / Digital inputs

ATE 300 displays 1 to 3 parameters that can be measured via the following connections:

- **3 analogue inputs:**
3 x 4-20 mA or 3 x 0-10 V
- **2 analogue inputs and 1 digital input**
2 x 4-20 mA or 2 x 0-10 V and 1 parameter via RS 232* connection
- **1 analogue input and 2 digital inputs**
1 x 4-20 mA or 1 x 0-10 V and 2 parameters via RS 232* connection

* parameter(s) from a KIMO external transmitter (Class 200 or 300) connected via Rs232 connection (proprietary protocol)



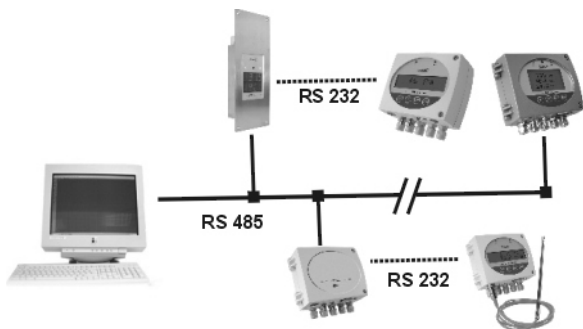
Digital communication

RS 232 communication

- Via the RS 232 connection, ATE 300 can display 1 to 2 parameters which are measured by other KIMO transmitters from Class 200 and 300.
- RS232 communication also enables to configure the transmitter via LCC-300 software.
- RS 232 connection cable is available in 2m, 5m or 10m (maximum) lengths.



RS 485 Modbus Protocol

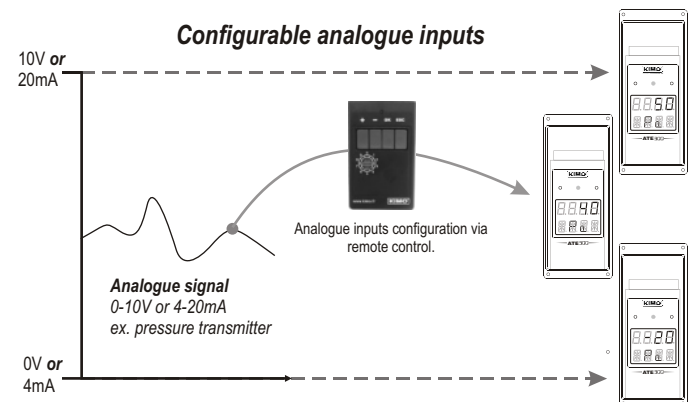


- ATT300 display enables to have a network of transmitters/displays on a RS485 modbus system, or to integrate them in an existing network.
- When one or several transmitters from Class 200 or 300 are connected to ATE 300 display, all information displayed can be sent to BMS via RS485, with only one address.
- RS485 digital communication is a 2-wire network on which transmitters are connected in parallel. They are connected to a PLC/BMS via the RTU Modbus communication system. In the same way as ATT configuration via remote control, Modbus system enables to configure at distance: activate/deactivate a channel, set the measuring ranges of each analogue inputs...
- With RS 485 Modbus protocol, ATT 300 can receive and display measurements carried out by other transmitters via a PLC.

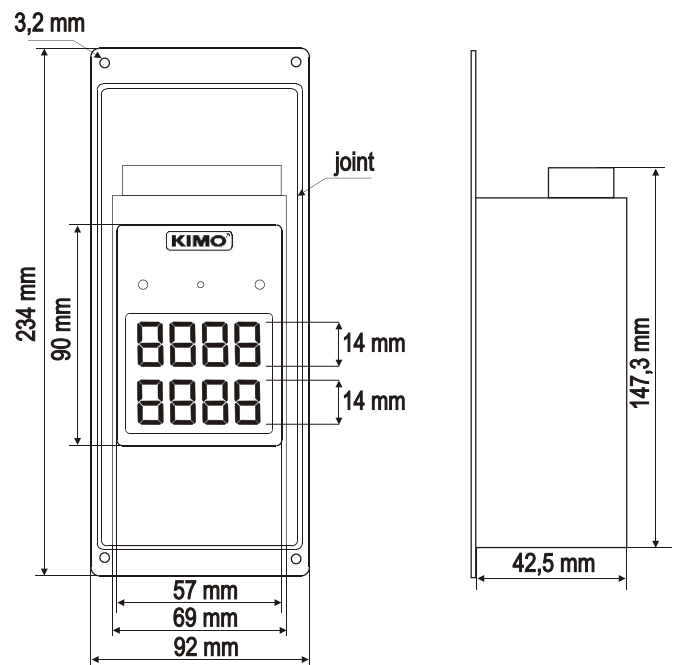
Configuration

You can configure all parameters: **units, analogue inputs, display channels** ... via the different methods shown below:

- **Via remote control** (optional)
For transmitters located in hard to reach positions.
See configuration manual.
- **Via software** (optional)
User-friendly configuration. See LCC-300 user manual.
- **Via Modbus** (optional)
Configuration of all parameters from your PC, via the supervision or data acquisition software.

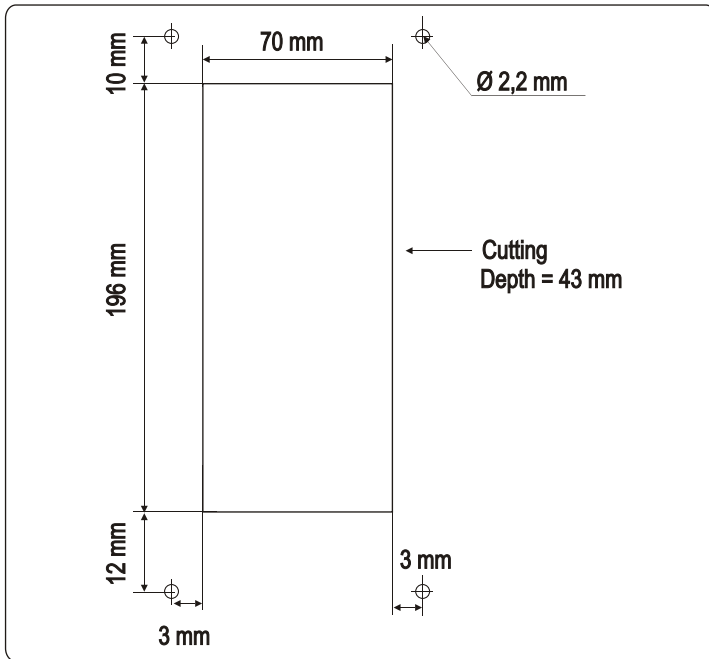


Housing dimensions



■ Mounting

To install the display on a wall, make a cutting of 196 x 70 mm in the wall. Drill 4 holes around the cutting, as shown below. Insert the display into the wall and then, screw the 4 screws (supplied with the transmitter).



■ Maintenance

Avoid aggressive solvents.

■ Options

- LCC 300 configuration software with RS 232 cable
- Configuration remote control.

■ Optional accessories

- Stainless steel or white lacquered housing for wall-mounting.

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