



## Panel Meters IND200

- 3 1/2 extra large and bright digits (25 mm, 1")
- Optional outputs: 4... 20 mA, 0... 10 V Isolated. High and low alarm relays.
- Metallic enclosure, DIN 1/8.
- Universal switching power supply, 85... 275 VAC.
- Service and 5 years guarantee.



Replaced by **id20**

[www.arian.cl/ingles/meters.htm](http://www.arian.cl/ingles/meters.htm)

**General Description** Ind200 Panel meters are Thermometers, Voltmeters, Ammeters, Adjustables 4..20mA, 0..10V and Tacometer.

Great and luminous digits give a clear reading to greater distance. Whereas optional optoisolated 4... 20mA and 0...10V outputs allow communications with other instruments or PLC's.

As all ARIAN instruments, has a universal current mode switching power supply, ideal for industrial environments.

### General Technical Specifications.

<b>Reading</b>	3 1/2 Digits of high brightness, 25 mm height.	
<b>Conversion</b>	Double slope ramp with automatic zero. 2.5 readings per Second.	
<b>Optional outputs</b>	4... 20 mA, 0... 10 V Opto Isolated	Analog outputs allows to have 0..10V or 0... 20mA, 4... 20mA, outputs proportional to the instrument reading. Output is isolated galvanically from the input (Opticaly) and supports potential differences of up to 1500 VAC. Thus it is appropriate for the interconnection with other instruments like PLC, motor drives, etc. The optional output provides regulated +15 volts (max. 80 mA. of consumption) for feeding transducers, actuators, etc. It allows in addition two types to connection, depending if it is desired to use the internal source of voltage doing a loop active (this is the normal way) or if it is desired to use greater outsourcing voltage working like passive loop. The 0...10 Volts output may drive up to 20 mA load (500 ohms).
	Relays, high and low alarm.	This option allows to set two alarms, high and low for the measured variable. Both relays operate normally open and close on alarm condition. The alarm relays act as ON/OFF with fixed hysteresis of approximately 0,5% to 1% of the reading. The high alarm relay closes when the measurement is greater than the value set for this alarm (Set high) Whereas the low alarm relay closes when the measurement is less to it set value (Set low)

<b>Power supply</b>	Switching, current mode.	
	Ac:	85... 275 Vac, 6 W, 45... 65 Hertz.
	Dc option:	20... 50 Vdc, 6 W.
<b>Construction</b>	Aluminum and Polycarbonate	IP65
	Total Dimensions:	DIN 1/8; 96 x 48 x 175 mm.
	Panel cut:	92 x 45 mm.
	Weight:	300 grams.
	Operation temperature:	0... 50 °C.

## Temperature meters

Models	Input	Range	Resolution
I-200-PT100/A	PT100 3 pts.	-200... 850 °C	1 °C
I-200-PT100/B	PT100 3 pts	-199,9... 199,9 °C	0,1 °C
I-200-TC/K	K thermocuple	-40... 1370 °C	1 °C
I-200-TC/J	J thermocuple	-40... 760 °C	1 °C

## Voltmeters and Ammeters:

Reading in the AC voltage and current meters is calibrated to RMS value of a senusoidal input, but the measurement is according to the average of the absolute value of the input. The frequency range of the input is 40-400Hz. and the maximum error is 0.5%. For the D.C. indicators the maximum error is 0.1%.

	Model	Range
Voltage Ac:	I-200-VAC / 0	0... 200 mVac
	I-200-VAC / 1	0... 2 Vac
	I-200-VAC / 2	0... 20 Vac
	I-200-VAC / 3	0... 200 Vac
	I-200-VAC / 4	0... 600 Vac
Current Ac:	I-200-IAC / 0	0... 0,2 mA ac
	I-200-IAC / 1	0... 2 mA ac
	I-200-IAC / 2	0... 20 mA ac
	I-200-IAC / 3	0... 200 mA ac
	I-200-IAC / 4	0... 2 To ac
	I-200-IAC / 5	0... 5 To ac
Voltage Dc:	I-200-VDC / 0	0... + / - 200 mV dc
	I-200-VDC / 1	0... + / - 2 V dc
	I-200-VDC / 2	0... + / - 20 V dc
	I-200-VDC / 3	0... + / - 200 V dc
	I-200-VDC / 4	0... + / - 2000 V dc

Current Dc:	I-200-IDC / 0	0... +/- 0,2 mA dc
	I-200-IDC / 1	0... +/- 2 mA dc
	I-200-IDC / 2	0... +/- 20 mA dc
	I-200-IDC / 3	0... +/- 200 mA dc
	I-200-IDC / 4	0... +/- 2 To dc
	I-200-IDC / 5	0... +/- 5 To dc

### Adjustable Indicators:

In these models the zero and gain adjusts to obtain the desired engineering units in the reading.

Model	input / Impedance	Typical use.
I-200-4... 20ma	0... 20 mA. 10 ohms	4... 20mA from transducers
I-200-0... 10v	0... 10 Vdc. 100 Kohms	0... 10Vdc from transducers
I-200-0... 60mVdc	0... 60mVdc. 100 Kohms	Use with current shunts.

### Tachometer: MODEL: I-200-TACOM

Measures frequency pulses of up to 130KHz being the reading calibrateable to engineering units (RPM, Hertz, etc).

It has 6 configurables standard inputs and an internal reference pattern for field calibration.

It provides a +5, 0, -5 volts, 80mA regulated power supply for the sensors.

#### Input Types:

Low AC Voltage (AC LOW)	Use with magnetic induction sensors (magnetic pick up ) such as fluxmeters, coils, etc. 160 Vac RMS maximum input volatge. AC coupled, 2Hz roll off, 50 mV sensitivity, 12 mVdc hysteresis, 1 Mohm input impedance.
High AC Voltage (AC HIGH)	High voltage pulse input, use for example on measuring freccuency of the 110VAC network. 500 Vdc maximum input volatge. DC coupled, 1V threshold, 0.5Vdc hysteresis, 500Kohm input impedance.
NPN or PNP open colector	For inductive proximity switches, encoders, etc.The instrument may supply +5, +10 Volts for feeding the sensor.
Mechanical Switch	Limit switch, etc.
TTL	Pulses coming from other instruments. 160 VAC RMS maximum input volatge. DC coupled, 2V threshold, 1Vdc hysteresis, 51Kohm input impedance.
Namur Switch (opcional).	Feeds 8.2 volts, 3 mA current limited, 1.65mA detection threshold.

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### PART CODES:

#### Opcionals:

- RELE	dual alarm relays.
- 420	isolated 4..20mA and 0..10V output
- DC	20.. 60 Vdc power supply.

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### FOR MORE INFORMATION:

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