
# ICO 62

Programmable digital panel meter for temperature and process signals

ICO 62 is a 10,000-point programmable digital panel meter 96 x 24 mm for temperature, process voltage and process current measurements.

# Description

ICO 62 is a 10,000 programmable digital panel meter 96 x 24 mm for temperature, process voltage and process current measurements. It can be used together with temperature sensors, either resistive probes Pt or thermocouples. It is possible to change the configuration of measurement type, range, limits and scaling.

The configuration of these parameters is protected against any inopportune modifications.

- Panel meter size: 96 mm x 24 mm
- IP40 protected
- Measurement, display and scaling of:
    - Temperature with Pt100, Pt1000 probes or thermocouples (7 types)
    - Process voltage and current (0-10 V, 4-20 mA)
    - Resistance
- 9 different power supplies available

# Specifications

## Electrical measurement indicator

| Type | Range (1) | Resolution | Accuracy (1 year) (23°C ±1°C) | Comments |
|---|---|---|---|---|
| DC voltage | >50 mV<br>500 mV<br>5 V<br>50 V | >10 µV<br>100 µV<br>1 mV<br>10 mV | >0.1% + 10 µV<br>0.1% + 100 µV<br>0.1% + 1 mV<br>0.1% + 10 mV | Input impedance<br>> 1000 MΩ<br>> 1000 MΩ<br>1 MΩ<br>1 MΩ |
| DC current | 4-20 mA or 0-50 mA | 10 µA | 0.2% + 10 µA | 10 Ω shunt |
| AC current | 1 A (2)<br>5 A (2) | 1 mA<br>1 mA | | Measuring current 200 µA |

Temperature coefficient: ≤ 10% accuracy/°C
Automatic ranging

(1) Extended measurement range: -40 to +110% range.

## Temperature indicator

| Type | Range (1) | Resolution | Accuracy over 1 year (23°C ±1°C) (2) |
|---|---|---|---|
| Pt100 | -200 to +500°C<br>-220 to +1200°C | 0.1°C<br>1°C | 0.1% RDG + 0.2°C<br>0.1% RDG + 2°C |
| Pt1000 | -200 to +500°C | 0.1°C | 0.1% RDG + 0.2°C |
| Tc K | -100 to +1000°C<br>+1000 to 1372°C | 0.1°C<br>1°C | 0.1% RDG + 0.4°C<br>0.1% RDG + 1°C |
| Tc T | -100 to +400°C | 0.1°C | 0.1% RDG + 0.4°C |
| Tc Platine | -100 to +1400°C | 0.1°C | 0.1% RDG + 0.4°C |
| Tc J | -120 to +999°C | 0.1°C | 0.1% RDG + 0.4°C |
| Tc L | -40 to +900°C | 0.1°C | 0.1% RDG + 0.4°C |
| Tc R | -50 to +120°C<br>+120 to 1768°C | 1°C<br>1°C | 0.1% RDG + 2°C<br>0.1% RDG + 1°C |
| Tc S | -50 to +450°C<br>+450 to 1768°C | 1°C<br>1°C | 0.1% RDG + 2°C<br>0.1% RDG + 1°C |

Temperature coefficient: ≤ 10% accuracy/°C
Display in °C or °F.

(1) For a defined type of sensor, the commutation of range and the change of resolution can be automatic.
Measurement range extendable.

(2) Accuracy given without reference junction.
The typical error brought by the reference junction (AN8002) is 0.3°C.

## Further features

| | |
|---|---|
| Measurement hold | Short-circuit on the rear panel |
| Statistics | Memorizing of maximum and minimum values |
| Scaling | The value is to be entered using keyboard, while the value of measurement corresponding can be is introduced of the same way, is measured by the instrument.<br>This possibility is very interesting for error corrections on temperature ranges. |
| Sampling rate | 2.5 samples / s |

## General specifications

| | |
|---|---|
| Size | 99 x 36 x 120 mm |
| Weight | 300 g |
| Display | From -1999 to 9999 with 14 mm red, yellow or green indication LED |
| Supply | 230 V at ±10% (50/60 Hz)<br>Other power supplies available in option |

## Environmental specifications

| | |
|---|---|
| Reference range | 23°C ±1°C (20 to 75 % w/o condensing) |
| Operating reference range | 0 to 50°C (RH: 20 to 75 % w/o condensing) |
| Limit operating range | -10°C to +50°C (RH: 10 to 80 % w/o condensing) |
| Indice de protection | IP40 in ABS case<br>IP65 in watertight metallic case |

## Safety

| | |
|---|---|
| Protections | - Protection of unit programming by access code.<br>- Protection of the threshold values by safety function programming |

# Models and accessories

## Instrument:

Ordering reference code: ICO52-Power supply-Display-Enclosure

**Power supply:**

| | |
|---|---|
| 48 V~ | 9 |
| 230 V~ | 8 |
| 115 V~ | 7 |
| 24 V~ | 6 |
| 36 to 72 V- | 5 |
| 18 to 36 V- | 4 |
| 9 to 18 V- | 3 |
| 5 V- | 2 |

**Display:**

| | |
|---|---|
| Red | R |
| Green | V |

## Accessories:

| | |
|---|---|
| AN8002 | Cold Junction Compensation Module |
| AN8003 | Shunt 1 A - 100 mV |
| AN8004 | Shunt 5 A - 100 mV |
| AN8005 | Shunt 4-20 mA (50 ohms) |
| AN5844 | Current transformer 2/1 A |
| AN5845 | Current transformer 20/1 A |
| AN5846 | Current transformer 200/1 A |
| ER42062-001 | RC protection circuit |