

## Temperature Calibrator (RTD) PJ 6541 - PJ 6542

Thermometers-calibrators allow to simulate temperatures thanks to RTD, and to measure the RTD for calibration of measurement instruments or temperature regulation lines.

Their robust construction enables them to support shocks and harsh environments.



- Temperature simulation and measurement (RTD)
- Pressure sensor
- Power supply of 24V loop
- Transmitter Test : simultaneous RTD emission and current measurement

### Applications.....

These calibrators are specially designed for on site verification and calibration of probes, indicators, recorders and regulators. PJ6552 has a dual function Measurement/Emission makes easier transmitter tests. They are useful for on site maintenance services: maintenance

department, designing, new works, thermic, electric, after sale, heating and cooling activities.

### Description.....

Ergonomic and easy of use, it has many functions:

- Temperature measurement and simulation by thermocouples

- Resistance measurement and simulation
- Pressure measurement
- Direct current measurement
- Switch test
- Power supply of 24 V loop

### Functions

#### PJ 6541 – PJ 6542.....

- Temperature measurement and simulation

Probes	Range	Accuracy *
Pt 50 (385)	-200 à 850 °C	0.5 °C
Pt 100 (385)	-200 à 850 °C	0.25 °C
Pt 200 (385)	-200 à 850 °C	0.6 °C
Pt 500 (385)	-200 à 850 °C	0.4 °C
Pt 1000 (385)	-200 à 400 °C	0.2 °C
D 100 (392)	-200 à 650 °C	0.25 °C
Ni 100	-60 à 250 °C	0.2 °C
Ni 120	-80 à 260 °C	0.2 °C

- Resistance measurement and simulation

Range	Current	Accuracy *
0 to 400 Ω	0.15 to 0.5 mA	0.15 Ω
0 to 400 Ω	0.50 to 3.0 mA	0.10 Ω
400 to 1500 Ω	0.05 to 0.8 mA	0.50 Ω
1500 to 3200 Ω	0.05 to 0.4 mA	1.00 Ω
3200 to 4000 Ω	0.05 to 0.3 mA	1.30 Ω

\* Temperature coefficient:  
-10 ... 10°C, 30 ... 50°C = 0.005% PE/°C

- Pressure measurement :  
With external pressure sensor (option). Measurement modules available from 25 mbar up to 700 bar.

#### PJ 6542.....

- Current measurement

Range	Accuracy *
0 to 55 mA	0.02% of reading + 3 units

- Power supply of 24 V loop :  
+/- 10% (35 mA maximum).
- Switch test :  
Opening / Closing, with a 2mA current.
- Hart resistance :  
(250 Ω) Enables the use of Hart protocol.

\* Accuracy is given for 1 year.

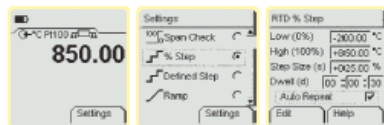
## Additional functions

### Hold function.....

Hold measurement value on display.

### Statistical Function.....

Mean, max, min values displaying.



### Signals emission.....

In emission it is possible to generate ramp, square or step signals.

### Alarms.....

Possibility to program 2 thresholds up and down, triggering an alarm.

### Lighting.....

Timed lighting of display.

### Automatic turn off.....

Turn off in case of non-use.

### IDOS output.....

Possibility to connect pressure sensor or PC

## General characteristics

### Display.....

Backlighted Graphical LCD display  
48 x 48 mm, with resolution: 99999.

### Operating conditions.....

Use temperature:  
-10 ... 50 °C.  
Humidity: 10 to 90%.  
Tight: IP54.

### Alimentation.....

3 x AA alkaline battery, autonomy: > 70 hours in measurement,  
> 10 hours in 24V supply.  
In option: NiMh battery with external charger.

### Connection.....

By banana 4 mm connectors.

### Presentation.....

Dimensions: 180 x 85 x 50 mm.  
Weight: about 500g.

## Options - Accessories

- Kit NiMh battery / external charger.
- Soft carrying case for unit and accessories.
- Belt Clip, hanging loop.
- Pressure sensor.
- RTD sensor : Refer to catalogue of product range.

## Metrological linking up

AOIP has metrological service enable by COFRAC calibration section under n° 2-1524 for Electricity-Magnetism and n° 2-1525 for Temperature. AOIP is able to

assure instrument traceability to COFRAC national calibration chain.

So PJ 6541/6542 are linked up to national and international

standards. They can be delivered with a verification certificate testifying of this traceability or with a calibration certificate including a number of points to choose.

COFRAC is equivalent to DKD in German, UKAS in UK or A2LA in USA.

## Ordering instructions

Thermometer-calibrator for RTD  
Thermometer-calibrator for RTD and transmitter

PJ 6541  
PJ 6542

### Options.....

- Pressure sensor
- Kit : Belt clip, hanging loop
- Soft Carrying case

ACL290-03  
ACL290-02  
ACL290-01



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