

LABFACILITY

TEMPERATURE & PROCESS TECHNOLOGY

About Labfacility

Formed in 1971, Labfacility specialize in the field of Temperature and Process Measurement.

We are the largest UK manufacturer of both temperature sensors and thermocouple connectors.

Quality & Service

Quality and Service are key elements in the continued growth of Labfacility.

Technical support is always freely available from our experienced technical sales teams and the company has ISO9001 accreditation.

Contact Details

Email sales@labfacility.com

Website
www.labfacility.com

Platinum Resistance Thermometer Pt100 Outdoor/Cold Store Temperature Sensors — IP67 Weatherproof Housing



- Weatherproof IP67 rated wall mounting Pt100 for accurate outdoor air temperature sensing
- Painted Die-Cast Aluminium Housing L80 x W74 x H54mm
- Perforated stainless steel probe, 12.7mm x 75mm
- Surface mounting
- Pt100, class B to IEC 751
- Temperature range -50 to 150°C
- M20 cable entry gland

dual element:

Duplex 2 x 4 wire with two independent sensing elements, allowing connection to two measurement or control devices; alternatively, one sensor may be used as a primary and the other as a back-up, eliminating the need to remove and replace the probe if one of the sensors should fail – can be connected to any Pt100 2, 3 or 4 wire instrument

single element with 4-20mA output:

Includes integral transmitter which converts the Pt100 sensor output to a standard industrial 4 to 20mA output signal over pre-configured range of -50 to +150 $^{\circ}$ C. It is also configurable by the user allowing range and burnout direction to be changed. It also allows the user to trim output current at either 4 or 20mA





About Labfacility

specialize in the field of **Temperature and Process**

We are the largest UK

manufacturer of both temperature sensors and thermocouple connectors.

Measurement.

Formed in 1971, Labfacility

LABFACILITY

TEMPERATURE & PROCESS TECHNOLOGY

Specifications

Construction: Housing - Painted Die-Cast Aluminium

Probe – 12.7mm diameter x 75mm long 316 stainless steel sheath.

Probe temperature range: -50°C to +150°C

Cable entry: M20 Nylon cable entry gland

| Sensor type | No. of elements | Pt100 connection | 4-20mA output | Order code |
|----------------|-----------------|---------------------|------------------|-------------|
| Pt100 | Duplex | 2 x 4 wire | No | XF-1111-FAR |
| Pt100 | Single | 3 wire | Yes (2 wire) | XF-1112-FAR |

TRANSMITTER SPECIFICATION @ 20 °C

Quality & Service

Quality and Service are key elements in the continued growth of Labfacility.

Technical support is always freely available from our experienced technical sales teams and the company has ISO9001

INPUT

Sensor Type PT100 100R @ 0°C 2 or 3 Wire Sensor Range (-200 to +850) °C (18 to 390) Ω Sensor Connection Screw terminal

25°C

Minimum span (*1)

BS EN 60751(IEC 751) standard /JISC 1604 Linearisation

0.2°C ± 0.05% of Reading Measurement Accuracy (*2)

Thermal Drift 0.0025 % / °C **Excitation current** <200 uA Lead Resistance effect 0.002 °C / Ohm Maximum lead Resistance 20 Ohms per leg

Contact Details

accreditation.

Email sales@labfacility.com

www.labfacility.com





LABFACILITY

TEMPERATURE & PROCESS TECHNOLOGY

About Labfacility

Measurement.

Formed in 1971, Labfacility specialize in the field of Temperature and Process

We are the largest UK manufacturer of both temperature sensors and thermocouple connectors.

Quality & Service

Quality and Service are key elements in the continued growth of Labfacility.

Technical support is always freely available from our experienced technical sales teams and the company has ISO9001 accreditation.

Contact Details

Email sales@labfacility.com

Website www.labfacility.com

OUTPUT

Output Type 2 wire (4 to 20) mA current loop
Output range (4.0 to 20.0) mA
Output Connection Screw Terminal
Maximum output 21.5mA (in high burnout condition)
Minimum output <3.9 mA (in low burnout condition)

Accuracy (mA output /2000) or 5 uA

(Whichever is the greater)

Maximum output load [(Vsupply-10)/21]K Ohms

(Example: 700 Ohms @ 24V)

GENERAL SPECIFICATION

Update time 500 ms
Response Time 1 second

Start-up time 4 seconds (I out < 4 mA during start up)

Warm-up time 1 minutes to full accuracy Power Supply (10 to 30) Volts dc

PUSH BUTTON CONFIGURATION

A single push button and LED indicator allows the user to navigate a three menus, allowing configuration of the transmitter. The menus are as follow: -

Menu 1 Configure range.

Menu 2 Configure burnout direction.

Menu 3 Trim output current @ either 4 mA or 20 mA

ENVIRONMENTAL

Ambient operating range $(-40 \text{ to } +85) ^{\circ}\text{C}$ Ambient storage temperature $(-50 \text{ to } +90) ^{\circ}\text{C}$

Ambient humidity range (10 to 90) % RH non condensing

WIRING CONNECTIONS



