

Specification – 881 APT

Addressable Pressure Transducer

Introduction

The 881 APT is an advanced, high reliability addressable pressure transducer for pressurised cable monitoring applications.



Features

- High resolution and accuracy
- Solid state Absolute pressure sensor
- Jumper address setting without a transducer tester
- Hardware address setting and calibration
- Ultra compact

Description

The 881APT is an advanced addressable pressure transducer using an ultra low power embedded micro-controller. It is suitable for direct in-joint or external housing applications. Jumper address settings permit the device to be applied conveniently without a tester. Ultra-low quiescent power consumption (50 uA typical) allows this transducer to operate at distances of up to 100 Km (depending on pair gauge and number of installed devices on the same pair). Hardware address setting and calibration ensures that address and calibration can never be altered accidentally.

Technical Characteristics

Pair Requirements

Pair RC (loop resistance x capacitance)	60 milliseconds max
Pair loop resistance	14000 ohms max
Pair insulation (leg to leg and leg to earth)	10 Megohms minimum

Environmental

Temperature – continuous operation	-20° to +60° C
Transportation and storage	-40° to +70° C
Relative humidity	0 to 95% non-condensing

Device Parameters

Resolution	0.5% of span
Accuracy	+/- 1% of span
Measurement range	950 – 1900 Mbar absolute
Over-pressure	2000 Mbar max
Surge protection	Ultra-fast Solid state (Tranzorb)
Size	86 x 23 x 16 mm
Protocol	3 bp/s PWM addressing, 20-40 Hz current ripple response
Power feed	50 VDC balanced (system supplied)
Current draw	<60 uA (quiescent) 1.2 mA (active)

Contact Monitronix Europe Ltd.

Email: enquiries@monitronix-europe.com

Tel: +353 (0) 61 303 982