

Datasheet 1235232, 1235233, 1235234, 1235235, 1235236, 1235237,
Stock No.s: 1235238, 1235239, 1235240, 1235241, 1235242

IWPT Series - Industrial Wireless Pressure Transducer



- **Pressure ranges from -1 to +400 bar gauge**
- **Up to 750m line-of-site range (depending on receiver)**
- **Piezo-resistive thick film ceramic sensor with stainless steel body**
- **Five year battery life at 10 second transmission update rate**
- **Simple DIL switch pairing with the single or five channel receiver**
- **Single or five channel receivers available**
- **User-selectable transmission update rates**
- **User-selectable 1-5V or 4-20mA receiver outputs**
- **Receiver clean contacts provide process alarm functions**

DESCRIPTION

The IWPT Wireless Pressure Transducer is a cost effective replacement to a traditionally wired pressure transducer that offers the advantages of a low-cost installation in inaccessible and expensive installation environments.

It is easily paired to the compatible IWR family of single- or five-channel wireless receivers thus offering a “plug and play” solution to your pressure measurement applications.

The instrument uses a piezo-resistive ceramic sensor mounted within a stainless steel housing giving excellent media compatibility for the harshest of applications. A swivel adaptor is available which allows the head to be easily aligned to the IWR receiver - see IWPT-SA

A line-of-sight range of up to 750m is possible depending on the wireless receiver used (refer to datasheets IWR-1 & IWR-5 for further information).

Each device is temperature compensated, calibrated and supplied with a traceable serial number.

TYPICAL APPLICATIONS INCLUDE:-

- **Simple cable replacement installation** – dispense with expensive cable runs
- **Environmental monitoring** – pumping stations, sewage plants, water treatment
- **Facilities management** – boiler rooms, plant hydraulics, plant pneumatics
- **Asset monitoring** – tank farms, process plants, HVAC and building management
- **Service Contract** – temporary installation for servicing and field trials

Transmitter Pressure Ranges

Nominal Pressure, Gauge, bar	1	2	5	10	20	50	100	250	400
Compound range, Gauge bar	-1 to 0	-1 to 2	-1 to 5	-1 to 9	-1 to 19	-1 to 24			
Permissible Overpressure bar	2	4	10	20	40	100	200	400	650
Burst Pressure bar	4	5	12	25	50	120	250	500	650

Transmitter Output

Transmission Frequency*	2.4 Ghz
Transmit Power	18 dBm
System Channel	User selectable via DIL switch
Antenna	Integral OdBI

*Compliant with EN 300 328, V1.8.1

System Performance

Accuracy (Non-Linearity & Hysteresis)	<±0.25% / FS (BFSL)
Setting Errors (offsets)	Zero & Full Scale, <±0.5% / FS

Instrument Power Source

Battery Type	User replaceable Lithium C cell
Battery Life	Five years at 10 second update rate
Battery Shelf Life	10 years



IWPT RS Pro 2016

IWPT Series

Industrial Wireless Pressure Transducer

Material Specifications

Pressure Housing	316 Stainless Steel
"O" ring seals	Viton
Diaphragm	Ceramic Al ₂ O ₃ 96%
Wireless Enclosure Material	Plastic
Weight	310g including battery
Installation position**	Any

** Consult installation manual to ensure adequate signal path between transmitter and receiver

Receiver Output Signals

Outputs*	1-5V or 4-20mA per channel
Single Channel Receiver	123-5252 (see data sheet)
Five Channel receiver	123-5253 (see data sheet)
Alarm Output	5 Amp rated changeover contacts
Transmission Update Rate***	1, 5, 10 and 30 seconds

*** Consult installation manual for set-up:
 - single channel system is DIL switch configurable
 - five channel system requires set-up using "IWR-Set" user software*

Temperatures & Thermal Effects

Media Temperature	-20°C to +135°C
Ambient Temperature	-20°C to +80°C
Storage Temperature	-20°C to +80°C
Compensated Temperature Range	-20°C to +80°C
Thermal Zero Shift	<±0.04% /FS/°C
Thermal Span Shift	<±0.02% /°C typical

Mechanical Stability

See user manual

Ordering Codes:-

Pressure Transducer	See table below
Spare battery	596-618, 201-9450
Single Channel Receiver	123-5252
Five Channel Receiver	123-5253
Five Channel Configuration Software	Supplied with 1235253
Swivel Adaptor	IWPT-SA

RS Part Number	Pressure Rating	Receiver Output
1235232	0 - 1 Bar G	1-5Vdc or 4-20mA
1235233	0 - 6 Bar G	1-5Vdc or 4-20mA
1235234	-1 to +9 Bar G	1-5Vdc or 4-20mA
1235235	0 - 10 Bar G	1-5Vdc or 4-20mA
1235236	0 - 16 Bar G	1-5Vdc or 4-20mA
1235237	-1 to +24 Bar G	1-5Vdc or 4-20mA
1235238	0 - 25 Bar G	1-5Vdc or 4-20mA
1235239	0 - 40 Bar G	1-5Vdc or 4-20mA
1235240	0 - 100 Bar G	1-5Vdc or 4-20mA
1235241	0 - 250 Bar G	1-5Vdc or 4-20mA
1235242	0 - 400 Bar G	1-5Vdc or 4-20mA

Mechanical Dimensions

