

IWPT Series

Industrial Wireless Pressure Transducer



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** – tanks farms, process plants, HVAC and building management
- **Service Contract** – temporary installation for servicing and field trials

- **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**
- **Suitable for liquids and gases**

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 316 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

The IWPT sensor should be used with either an IWR-1 or IWR-5 receiver. 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.

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

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ISO9001 CERTIFIED

IWPT 2018

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



Made in the UK

www.cynergy3.com

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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
Environmental protection	Designed to IP68 (not recommended for submersion due to signal loss)

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

Receiver Output Signals (requires either IWR-1 or IWR-5 receiver)

Outputs	1-5V or 4-20mA per channel
Single Channel Receiver	IWR-1 (see data sheet)
Five Channel receiver	IWR-5 (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
Thermal Zero Shift	<±0.04% /FS/°C
Thermal Span Shift	<±0.02% /°C typical

Mechanical Stability

See user manual

Ordering Codes:-

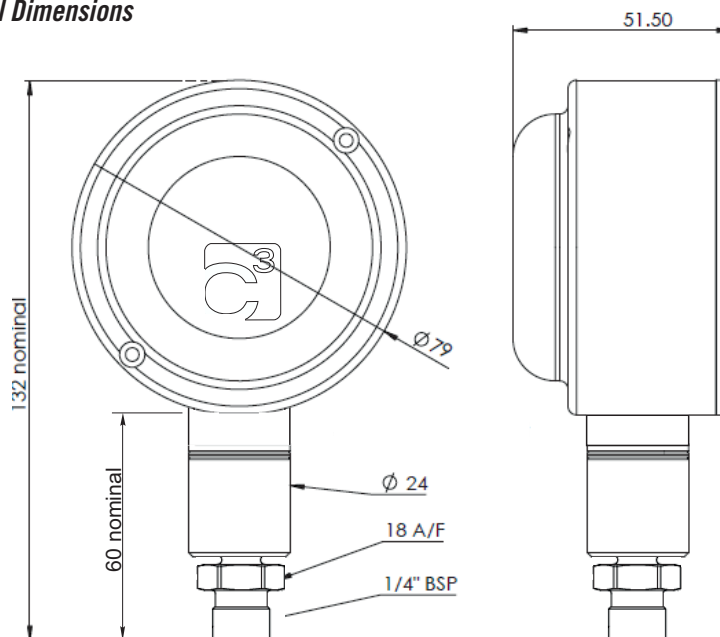
Pressure Transducer	See table below
Spare battery	IBAT-1
Single Channel Receiver	IWR-1
Five Channel Receiver	IWR-5
Five Channel Configuration Software	IWR-Set (free download*)
Swivel Adaptor	IWPT-SA

*Download user configuration software here:-

https://www.cynergy3.com/sites/default/files/IWR-Set_v2.1_installer_0.exe

Part Number	Pressure Rating	Receiver Output
IWPT-G1000-00	0 - 1 Bar G	1-5Vdc or 4-20mA
IWPT-G6000-00	0 - 6 Bar G	1-5Vdc or 4-20mA
IWPT-GM1P9-00	-1 to +9 Bar G	1-5Vdc or 4-20mA
IWPT-G1002-00	0 - 10 Bar G	1-5Vdc or 4-20mA
IWPT-G1602-00	0 - 16 Bar G	1-5Vdc or 4-20mA
IWPT-C0184-00	-1 to +24 Bar G	1-5Vdc or 4-20mA
IWPT-G2502-00	0 - 25 Bar G	1-5Vdc or 4-20mA
IWPT-G4002-00	0 - 40 Bar G	1-5Vdc or 4-20mA
IWPT-G1003-00	0 - 100 Bar G	1-5Vdc or 4-20mA
IWPT-G2503-00	0 - 250 Bar G	1-5Vdc or 4-20mA
IWPT-G4003-00	0 - 400 Bar G	1-5Vdc or 4-20mA

Mechanical Dimensions



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Sensata:

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