

# IWPTL Series

## Low Range Industrial Wireless Pressure Transducer



- Suitable for liquids and gases
- Pressure ranges from 0-50mbar to 0-1000mbar gauge
- Up to 750m line-of-site range (depending on receiver)
- Piezo-resistive stainless steel 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 IWPTL 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 silicon 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.

### TYPICAL APPLICATIONS INCLUDE:-

- **Simple cable replacement installation** – dispense with expensive cable runs
- **Environmental monitoring** – rainwater harvesting, environmental engineering
- **Facilities management** – boiler rooms, laboratory testing, tank gauging
- **Asset monitoring** – tank farms, process plants, HVAC and building management
- **Service Contract** – temporary installation for servicing and field trials

### Pressure Ranges and Passive mV/V Outputs

Nominal Pressure, Gauge, mbar	50	100	250	500	750	1000
Nominal Pressure, Absolute mbar				500	750	1000
Permissible Overpressure mbar	2 bar	2 bar	2 bar	5 bar	5 bar	5 bar

### 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

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### 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

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### Material Specifications

Pressure Housing	316 Stainless Steel
"O" ring seals	Viton
Diaphragm	316 stainless steel
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

### 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

### 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\*

### Ordering Codes:-

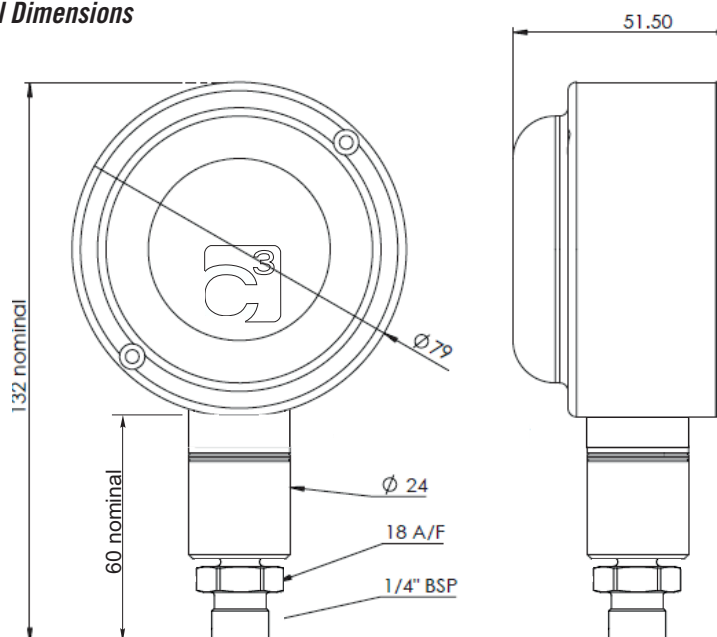
Pressure Transducer	See table below
Spare battery	IBAT-1
Single Channel Receiver	IWR-1
Five Channel Receiver	IWR-5
Five Channel Configuration Software*	IWR-Set
Swivel Adaptor	IWPT-SA

\*Download user configuration software here:-

[https://www.cynergy3.com/sites/default/files/IWR-Set\\_v2.1\\_installer\\_0.exe](https://www.cynergy3.com/sites/default/files/IWR-Set_v2.1_installer_0.exe)

Part Number	Pressure Rating	Receiver Output
IWPTL-G0050-00	0 - 50mbar G	1-5Vdc or 4-20mA
IWPTL-G0100-00	0 - 100mbar G	1-5Vdc or 4-20mA
IWPTL-G0250-00	0 - 250mbar G	1-5Vdc or 4-20mA
IWPTL-G0500-00	0 - 500mbar G	1-5Vdc or 4-20mA
IWPTL-G0750-00	0 - 750mbar G	1-5Vdc or 4-20mA
IWPTL-G1000-00	0 - 1000mbar G	1-5Vdc or 4-20mA
IWPTL-A0500-00	0 - 500mbar Abs	1-5Vdc or 4-20mA
IWPTL-A0750-00	0 - 750mbar Abs	1-5Vdc or 4-20mA
IWPTL-A1000-00	0 - 1000mbar Abs	1-5Vdc or 4-20mA

### Mechanical Dimensions



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