

IWPTLU SERIES

LOW RANGE INDUSTRIAL WIRELESS PRESSURE TRANSDUCER



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

SPECIFICATIONS

Transmitter Output

*Transmission Frequency	2.4 Ghz
Transmit Power	18 dBm
System Channel	User selectable via DIL switch
Antenna	Integral 0dBi

*Compliant with EN 300 328, V1.8.1

The IWPTLU 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.

The IWPT sensor can be used with either an IWR-1 or IWR-5 receiver. A line-of-sight range of up to 1640 ft 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.

Features

- Suitable for liquids and gases
- Pressure ranges from 0-1psi to 0-15psi gauge/abs
- Up to 1640 ft 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 4-20 mA receiver outputs
- Receiver clean contacts provide process alarm functions

System Performance

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

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.	

Receiver Output Signals

Receiver Part Number	Receiver Outputs
IoT Gateway	Built-in cellular modem allows all data to be sent to remote servers
IWR-PORT	RS-232 or RS-485 or Ethernet MODBUS Communications. Up to 128 off analog 4-20 mA or Relay outputs can be obtained by fitting extra ISOSLICE I/O modules
IWR-USB	Displays & Logs data on any PC running IWR-USB software
IWR-5	5 off 4-20 mA or 1-5 V dc and 1 Relay output
IWR-1	1 off 4-20 mA and 1-5 V dc and 1 Relay output
***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	

PRESSURE RANGES

Transmitter

Nominal Pressure, Gauge	psi	0.75	1.5	3.75	7.5	11.25	15
Nominal Pressure, Absolute	psi				7.5	11.25	15
Permissible Overpressure	psi	30	30	30	75	75	75

Instrument Power Source

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

Environmental Conditions & Thermal Effects

Media Temperature	-20°C to +135°C
Ambient Temperature	-20°C to +80°C
Storage Temperature	-20°C to +80°C
Humidity	5% to 95% RH non-condensing
Thermal Zero Shift	<±0.04% /FS/°C
Thermal Span Shift	<±0.02% /°C typical

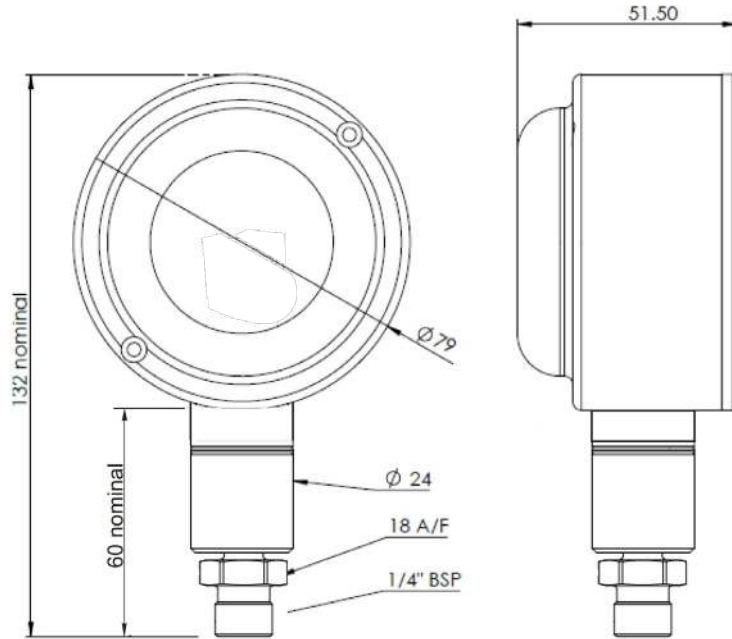
Mechanical Stability

See user manual



DIMENSIONS

All dimensions are in millimeters.



ORDERING OPTIONS

Example : IWPTLU

Pressure Transducer	See table below
Spare Battery	IBAT-1
Receiver	IoT Gateway, IWR-PORT, IWR-USB, IWR-5, IWR-1
Five Channel Configuration Software*	IWT-IWR Configuration Software (free download*)

Part Number	Pressure Rating	Receiver Output
IWPTLU-GP001-00	0 - 1psi G	1-5Vdc or 4-20mA
IWPTLU-GP002-00	0 - 2psi G	1-5Vdc or 4-20mA
IWPTLU-GP005-00	0 - 2psi G	1-5Vdc or 4-20mA
IWPTLU-GP008-00	0 - 8psi G	1-5Vdc or 4-20mA
IWPTLU-GP010-00	0 - 10psi G	1-5Vdc or 4-20mA
IWPTLU-GP015-00	0 - 15psi G	1-5Vdc or 4-20mA
IWPTLU-AP005-00	0 - 5psi Abs	1-5Vdc or 4-20mA
IWPTLU-AP010-00	0 - 10psi Abs	1-5Vdc or 4-20mA
IWPTLU-AP015-00	0 - 15psi Abs	1-5Vdc or 4-20mA

*Free download user configuration software [here](#)

Made in the UK

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