

# DIGITAL & ANALOGUE WIRELESS POINT TO POINT SYSTEM



## LOW COST WIRELESS DIGITAL AND ANALOGUE SIGNAL TRANSMISSION

The Digital and Analogue WP2P system is a wireless solution used to measure levels, pressure or flow sensors, without needing to trench a cable.

The system comprises two digital and analogue wireless point to point modules that are located within line of sight of each other. Each module has one analogue input (0-20mA or 0-10V), one analogue output (0-20mA or 0-10V), two switched inputs and two relay outputs - allowing you to transmit an analogue sensor reading and two digital signals. For example you can measure a water storage level or provide a control signal for a VSD, while also turning pumps on or off and receiving alerts for faults.

No configuration or programming is required, simply connect the power, and go!

### Key Features

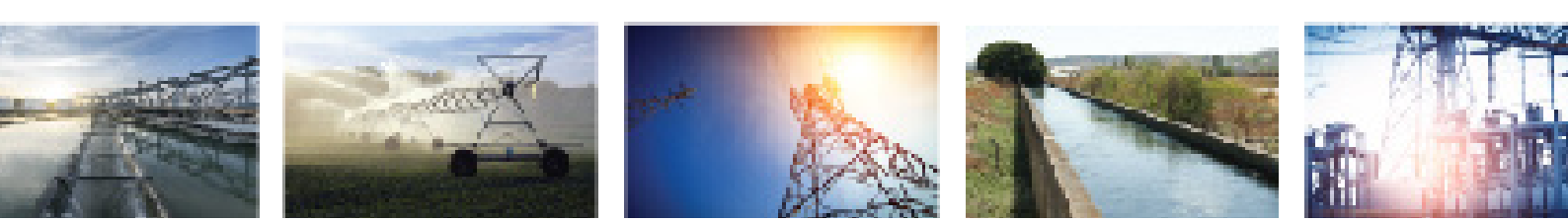
- Isolated I/O interface section for improved power saving operation
- Failsafe output hold feature during communications failure
- Line of sight operational range up to 350m with supplied antennas, 2km with optional whip antennas, or 4km with optional Yagi antennas
- 900MHz Digital Modulation radios for added security
- "Link status" LED provides confirmation that the modules are communicating
- USB interface for on-site firmware upgrades
- Easily add a QTech Wireless Repeater to extend the range of the system
- Very competitive pricing

*Note: For these radio systems to work they must have clear "line of sight" between the modules. Depending on the terrain and the antennas being used, the WP2P system can transmit up to four kilometres. Where there are obstacles, hilly terrain or to increase the range, QTech's WP2P Repeater module can be used to provide a reliable communications path.*

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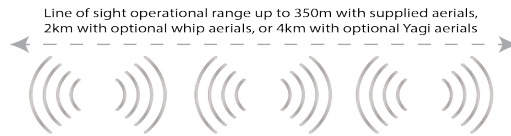
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## Applications



- e.g., Digital & Analogue Wireless Point to Point unit at home or in the shed:
- Connected to a screen showing water levels in a tank.
  - Press a button to start or stop the pump.
  - A light comes on when the pump is running, or when there is a fault.



- e.g., Digital & Analogue Wireless Point to Point unit at the remote site connected to a pump or tank:
- Analogue water level information sent back to home or the shed for viewing.
  - Pump starts or stops as per instruction from home or the shed.
  - If there is a fault at this end, a light activates back at home or the shed.

## Specifications

- Frequency 917MHz to 927MHz (in ISM Band)
- RF output 100mW
- Digital modulation technology
- Antenna connector SMA (Female)
- Analogue interfaces have 12bit resolution with a typical accuracy of +/-1%
- Analogue inputs sampled once per second
- Dimensions L 112 x W 76 x D 26mm
- Steel and powder coated enclosure
- Power connector 2.1mm DC jack, centre positive
- Supply voltage 12 - 13.8VDC
- Short circuit and reverse polarity protection
- Current consumption 100mA (average)
- Weight 350g per module

## Performance

- Indoor/urban line of sight up to 350m with supplied 2.1dB stub dipole antenna
- Outdoor line of sight up to ~2km with optional 3db whip antenna
- Outdoor line of sight up to ~4km with optional 6dBi Yagi antenna
- Receiver sensitivity -110dBm

*Note: Distances are indicative and terrain dependent*

## Radio Network Options

- 20 channels

Radio Code: For security a six digit code is assigned to all devices. All modules in a system require the same code to operate

## Input & Outputs

- 2x Switched input (normally open, close to activate)
- 2x Volt free relay contact (normally open)
- 1x Analogue input 0-20mA or 0-10VDC
- 1x Analogue output 0-20mA or 0-10VDC
- Maximum total switching current: 2 Amps @ 32VDC

## Mechanical Mounting

- 4 x M4 fixing holes at 103 x 50mm centres

## Ordering Details

**Product Code:** PD8812E-WP2P-A - System supplied as a matching pair

**Product Code:** PD8811E - Digital 900MHz Repeater

*Please refer to our website for further product information and optional accessories*

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