

The **P2P-R** Wireless Repeater is the perfect addition to a Twin Link system where the Input and Output nodes are out of range, or a line of sight connection cannot be established.

- › **Extend the transmission range of your Twin Link**
Add up to 1.5km (0.9mi) Line Of Sight for each Repeater
- › **Get around RF obstacles**
- › **Easy integration with your Twin Link**
- › **Up to 15 Repeaters per Point-to-Point system**
That's a total wireless transmission distance of up to 24km (14.9mi) LOS

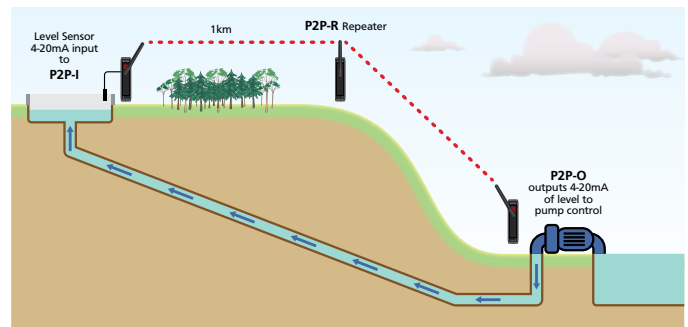
FCC FCC ID 2ACCTT-1409 **CE**  E2180



Example of Use

A wireless Link is needed between a reservoir and a pump station. The **Input Node** will measure the incoming 4–20mA signal from the reservoir level sensor, and the **Output Node** will output 4–20mA to the pump controller, to control the water levels in the reservoir.

The reservoir is over a hill, so there is no line of sight between it and the pump station. By placing a **Repeater** at the top of the hill within line of sight of both the **Input** and **Output** nodes, a successful Link can easily be made.



Specifications

General

Power supply 9–36V DC, 2.5VA max

Simple software programming using Define ToolBox

Connect to the **P2P-I** Input Node (Bridge Key required, sold separately)

Transmission

RF data rate 250Kb/s

RF frequency range 2405-2475MHz

RF receiver sensitivity -110dBm

RF transmission power +20dBm (Optional low power setting [10dBm] selectable in software)

Transmission range Up to 1.5km (0.9mi) LOS with supplied antenna (WG-3DBI). All nodes must be set to full power [+20dBm] for max range.

Number of RF channels 15

Up to 17 wireless nodes per mesh Twin Link (**P2P-I** & **P2P-O**) plus up to 15x Repeaters (**P2P-R**)

Spreading method Direct sequence

Modulation O-QPSK

Construction

35mm DIN rail mount casing IP20 rated. Install in a protective enclosure. Installation Category II; Pollution Degree 2; Flame resistant

Dimensions (H x W x D)

101 x 23 x 120mm (3.98 x 0.91 x 4.72")

With included antenna:

150 x 23 x 146mm (5.91 x 0.91 x 5.75")

Single unit weight 113g (4oz), with included antenna and plugs

Environmental conditions

Operating temp -20 to 55°C (-4 to 131°F)

Storage temp -20 to 65°C (-4 to 149°F)

Operating humidity 0–85% non-condensing

Altitude 2000m (6561ft)

Compliances

FCC ID: 2ACTT-1409 47 Code of Federal Regulations; Part 15 - Radio Frequency Devices; Subpart C - Intentional Radiators, including Section 15.247 - Operation in the band 2400 -2483.5MHz

AS/ANS 4268:2012 Radio equipment and systems - Short range devices - Limits and methods of measurement

ETSI EN 300 440-2, V1.4.1, 2010 Electromagnetic compatibility and Radio spectrum matters (ERM); Short Range Devices (SRD); Radio equipment to be used in the 1GHz to 40GHz frequency range; Part 2: Harmonised EN under article 3.23 of the R&TTE Directive

EN 301 489-3, V1.6.1, 2013 Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short Range Devices (SRD) operating on frequencies between 9kHz and 40GHz

P2P Product Codes

P2P-TWIN-LINK	Point-to-Point paired I/O units
P2P-R	Point-to-Point Repeater Node
P2P-I*	Point-to-Point Universal Input Node
P2P-O*	Point-to-Point Output Node

* Not sold separately unless for replacement

Accessories (Sold Separately)

FCC approved 3DBi monopole antenna included with all P2P units. All other accessories are not FCC approved.

WG-8DBI	8DBi Monopole antenna (Range= 2.7km [1.7mi] LOS)
WG-AEC	Antenna extension cable 30cm
BRIDGE-KEY	USB Bridge Key for PC programming

Set up your P2P system in minutes! Visit defineinstruments.com/toolbox

