

DATRAN - WRTU WIRELESS RTU

LOW POWER, DIGITAL RADIO TELEMETRY FOR DATRAN

The WRTU is a multi-purpose telemetry device to capture remote I/O signals in to DATRAN systems over a low power, low cost digital radio system. The WRTU expands the telemetry options for your DATRAN system and is more cost effective than traditional expansion modules and radio links.



WRTU modules are available with digital I/O (WRTU-D) or digital plus analogue I/O (WRTU-DA), allowing you to transmit 4-20mA sensor readings as well as remotely control electrical devices. For example, a WRTU-DA can provide water level information and turn pumps on and off from the DATRAN VI SCADA user interfaces.

The WRTU also allows the implementation of small SCADA systems using short range digital radio communications. When used in conjunction with the DATRAN XL4 Plus RTU, the WRTU creates extended reach in applications such as rural tank monitoring, flow meter points or irrigation system control.

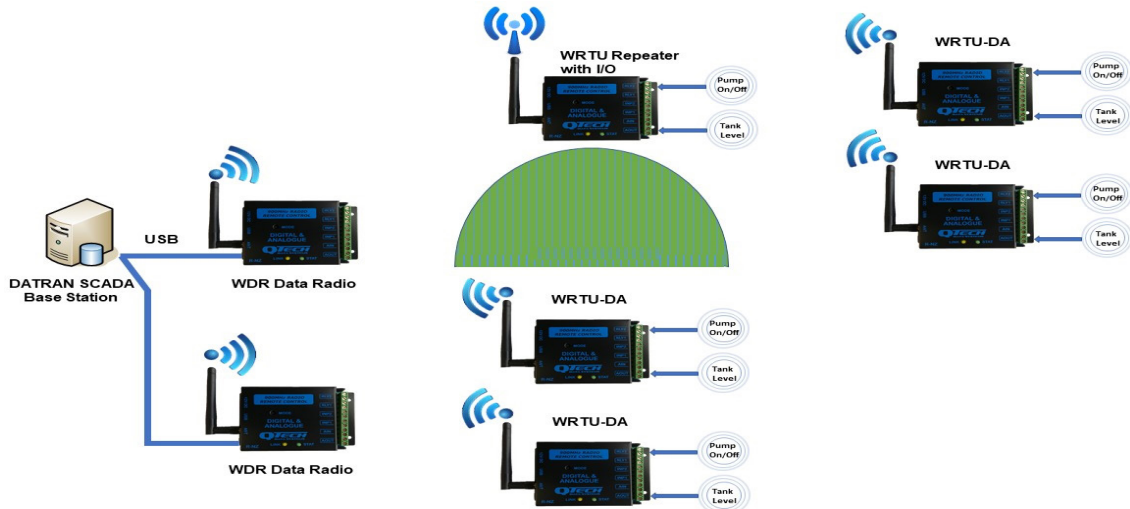
WRTUs are low power and suitable for use with a solar charger or can be connected to a permanent DC supply. The WRTU-D can be easily integrated with QTech's RSS01 Remote Solar Station.

A wireless repeater can also be used to extend the range, repeaters are available with and without local I/O.

- Low power digital radio solution perfect for solar power
- Flexible configuration options via QTech Workbench software
- Pulse counting capability



APPLICATIONS



SPECIFICATIONS

- Frequency 917MHz to 927MHz (ISM Band)
- RF output 100mW
- Digital modulation technology
- Antenna connector SMA (Female)
- Dimensions L 112x W 76 x D 26mm
- Steel and powder coated enclosure
- Power connector 2.1mm DC jack, centre positive
- WRTU-D Supply voltage 6-24V DC
- WRTU-DA Supply voltage 12-13.8V DC
- Short circuit and reverse polarity protection
- Current consumption;
 - WRTU-D 6mA typical
 - WRTU-DA 75mA typical

PERFORMANCE

- Indoor/urban up to 350m with supplied stub antenna
- Outdoor up to ~2km with optional 3db whip antenna
- Outdoor up to ~4km with optional 6dBi Yagi antenna
- Receiver sensitivity;
 - GFSK - 110dBm
 - LoRa - 148dBm (coming soon)

Note: Distances are line of sight 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
- Repeater Option to extend range

WRTU-D INPUT & OUTPUTS

- 3x Switched inputs (normally open, close to activate)
- 3x Volt free relay contacts (normally open)
- Max. total switching current 2 Amps @ 32V DC

WRTU- DA INPUTS & OUTPUTS

- 2x Switched inputs (normally open, close to activate)
- 2x Volt free relay contacts (normally open)
- 1x Analogue input 0-20mA, 0-10V DC
- 1x Analogue output 0-20mA, 0-10V DC
- Max. total switching current 2Amps @ 32V DC

MECHANICAL MOUNTING

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

ORDERING DETAILS

Product Codes: PD8700 - WRTU-D, PD8701 - WRTU-DA, PD8702 - WDR (includes USB cable)

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

QTech Data Systems
 12 Midas Place Middleton
 Christchurch 8024

Phone +64 3 366 3713
www.qtech.co.nz
sales@qtech.co.nz

QTECH
 DATA SYSTEMS