

# QDR 900MHz DIGITAL RADIO



## COST EFFECTIVE LOW POWER DIGITAL RADIO TELEMETRY SOLUTION

The QTech Digital Radio (QDR) is a low power, high speed digital radio, up to 9600bps.

The QDR can be used for communication between DATRAN RTUs and I/O expansion modules eliminating the need for expensive cabling; between DATRAN RTUs in master/slave configuration, or as a “point to point” system for industrial RS232/RS485 wireless links.

The QDR uses 900MHz digital modulation technology that is compliant to AS/NZS 4268:2008, and operates in the ISM “free-to-air” band with no licensing costs.

The QDR has a low power consumption and draws a maximum current of 150mA, making it perfect for solar and battery powered sites.

Low power use, coupled with a line of sight operating range of up to 6km (terrain dependent), makes the QDR a cost effective communication solution for many telemetry applications.

### Key Features

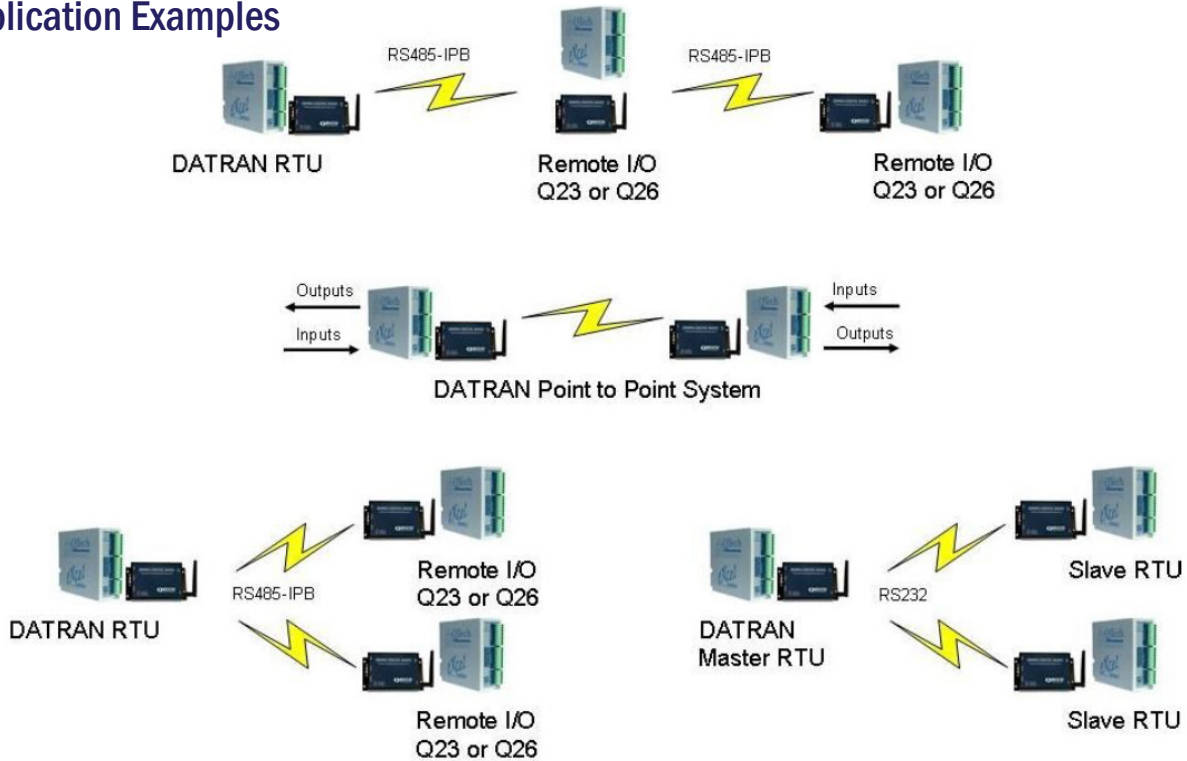
- Low power consumption
- Operational Range up to 6km
- Compliant to AS/NZS 4268:2008
- High speed, up to 9600bps
- Cost competitive
- Easy mounting and installation

### Key Benefits

- Radio alternative to multicore cables
- Flexibility - Start with a single pair of QDRs and easily extend this network with extra units
- An affordable high quality solution



## Application Examples



## Specifications

- Frequency 917MHz to 927MHz
- RF Output 1mW to 250mW
- Modulation GFSK Gaussian Frequency Shift Keying
- 6 configurable channels
- Maximum Packet Size 255 bytes
- Antenna connector SMA
- Weight 330g
- Dimensions L 200 x W 107 x D 37 mm
- Enclosure Steel, powder coated
- Power Supply 7 to 28 V DC (Nominal 12/24 V DC) (Supply must be grounded negative, not SMPS double insulated type)
- Current Consumption 85mA in standby @12V
- Current Consumption 150mA when transmitting @12V
- Indications Green LED -Status Yellow LED -Receive Orange LED -Transmit

## Mechanical Mounting

- 4 x M4 fixing holes at 130mm centres - 47mm pitch at aerial end, 58mm at connector end

## Ordering details

Product Code: PD9119-232 (for RS232 use)

Product Code: PD9119-485 (for RS485 use)

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

## Network Configuration Options

- Customer unique ID 1 to 255
- Site Number 1 to 255
- Radio Address 1 to 255
- Channel Number 1 to 6
- RF Power Level 1 to 8 (1mW to 250mW)
- Repeater Mode On or Off
- Serial Modes None/RS232/RS485 (2 wire)/RS485(4 wire)

## Performance

- Indoor line of sight up to 350m with supplied 2.1dB dipole antenna
- Outdoor line of sight up to 2km with optional 3.1dB whip antenna
- Outdoor line of sight up to 6km with optional 6dB whip or Yagi antenna
- Data Rate 9600bps for interface and RF
- Receiver sensitivity -110dBm

**QTech Data Systems**  
**12 Midas Place Middleton**  
**Christchurch 8024**

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

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**DATA SYSTEMS**