

MReX-SATLINK

The MReX-SatLink is a weatherproof solar powered IoT gateway that shifts data using satellite or cellular modem options.

Wired sensors can be directly connected via analog or digital input connections or through an RS422 serial connection. Compatible with Modbus sensors of most types.

GENERAL OPERATION

The MReX-SatLink manages both power usage and message packaging to ensure that data and power and operating costs requirements remain extremely

Depending on configuration, the unit collates periodic messages from all field IoT sensors, and ensures that many sensors have data transmitted with only the cost of a single satellite/cellular message transmission.

Not only does this mean that the power requirements for the data offloading remain low, but also ensures that monitoring data costs are minimal.

ULTRA LOW POWER

The internal WTE MReX-460 module receiver operates with extremely low current while the data transceiver can remain completely off for

the majority of the time. The satellite transceiver only needs to be briefly powered for message transmissions.

The MReX-SatLink includes a custom designed weather protected solar panel with rechargeable battery - this means installations can be very cost effective and fast to install. Complete installations can be as simple as attaching the MReX-SatLink to a fencepost, and connecting antennas to the unit.

MReX-SATLINK APPLICATIONS:

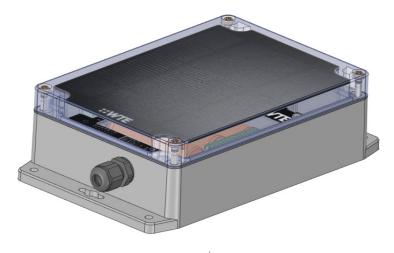
- · Environmental monitoring remote reporting of water levels and weather conditions.
- Mining and Regulatory compliance monitoring.
- Agriculture simple reporting of equipment faults such as on irrigators or pumps.
- · Marine and mussel farming transmission performance over water is exceptional - ranges over 5km can be expected.
- · Pest trap monitoring especially useful in remote locations.

CUSTOMISABLE

The WTE MReX-SatLink is designed in-house, and can be customised to meet your needs.

FIELD PROVEN

THE MREX-SWARM IS CURRENTLY IN USE IN THE MOST HOSTILE AND INACCESSIBLE AREAS.





FEATURES:

- · Wirelessly transmits data via several modem options (Satellite, Cellular or UHF radio).
- Send sensor data at programmed times/intervals.
- Modbus Master operation for automated querying from a wide variety of external sensors.
- Modbus RTU Slave configuration for integration with existing systems.
- Supports up to 3 Modbus sensors concurrently.
- Multiple analog and digital inputs for direct connection to and reading of external sensors.
- · Pulse counting support for inputs.
- Built-in 12V switched power supply to independently power external sensors.
- Flexible formatting of I/O, Modbus and system data into transmitted data messages.
- UHF radio sensor link provides range coverage up to 2km in bush - and greater than 15km line of sight with antenna elevation.
- WTE message data compression greatly reduces number of billable transmissions without loss of data.
- Many cable entry options to best fit your application.
- Rapid installation.
- Directly integrates with all WTE radio products.
- Affordable with volume discounts.





MReX SATLINK

SPECIFICATIONS:

MReX-460 Frequency RangeMReX-460: 421MHZ to 480MHZ 450MHZ (1200 BAUD) -124 dBm OPTIONAL EXTERNAL SUPPLY VOLTAGE Min 6V, Max 15V. INTERNAL RECHAREABLE BATTERY 3 HHR-380A (3800mAh NiMH). **OPERATING CURRENT: OPTIONAL SATELLITE OPTIONAL CELLULAR** STANDBY:<50uA (lower power option) **DIGITAL OUTPUTS** 4 Open Drain (max 100mA)

EXTERNAL ANTENNA

MReX Antenna

PCIE MODEM

3x HHR-380A **BATTERIES** I/O + RS422/485 + MODBUS CONNECTIONS

OPTIONS FOR SIDE

OR REAR CABLE ENTRY

MECHANICAL:

WEIGHT
DIMENSIONS
Environmental
Operating Temperature10 to +55 °C
P RATING
MReX-460 RADIO SUPPORT: DATA BAUD RATES
25KHZ CHANNEL WIDTH
12.5KHZ CHANNEL WIDTH
2400(GFSK), 4800 (GFSK), 9600 (4GFSK)
5.25KHZ CHANNEL WIDTH

REGULATORY COMPLIANCE

217
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385
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189
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160
138
101
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