

Messenger BLE INTEGRATED TELEMETRY SYSTEM



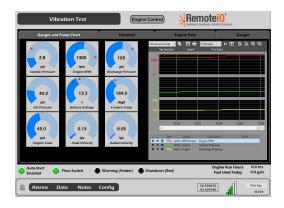
TWO-WAY COMMUNICATION ON REMOTE EQUIPMENT

FEATURES

- The unit works with electronic engine controllers, ECU's, devices on a CANbus, devices connected via Modbus RTU and direct connections to digital and analog signals
- Pre-configured to monitor and report standard CANbus engine messages
- Daily fuel rate, maximum and minimum values of all engine parameters are automatically reported
- Engine diagnostics are filtered to eliminate excessive reporting on intermittent faults
- Supports multiple CANbus speeds, multiple devices on a single CANbus and reading and writing (for OEMs)
- Supports up to four digital inputs for detecting on/off conditions or used as pulsing inputs (e.g. flow meters)
- Three analog inputs for current or voltage inputs, reported as raw data or converted to engineering units
- Two output relays controlled manually or automatically based on analog values exceeding thresholds or digital inputs changing state
- Independent Modbus master and slave communication over two serial ports
- Supported Modbus functions include 16-bit and 32-bit versions of: register, coil, float and packed-digital reads and writes
- Backend reporting via UDP or TCP using proprietary protocol
- The Satellite modem option enables coverage in hard-to-reach areas around the globe
- Easily activate and link to your BLE with the RemotelQ™ Messenger BLE app from any mobile device

APPLICATIONS

- Diesel engines
- Generators
- PLCs
- Smart controllers









Messenger BLE

CATTRON

Satellite modem

TECHNICAL DATA AND SPECIFICATIONS

Non-CANbus GPS coordinates for location

Conditions General purpose or pulse closure-to-ground inputs

Analog inputs for external sensors

Geo-fencing Engine hours

Pre-Configured **CANbus Parameters** From One or More

RPM

Battery voltage

ECUs

Cellular

Oil pressure, temp and level

Fuel level Coolant level and temperature

Odometer Throttle and accelerator position

Air filter differential pressure

Hard acceleration and braking North America: LTE CATM1, CAT1 or Satellite Worldwide: LTE CAT1 or Satellite

Serial Ports

PPP connection for connection to Internet for PCs or display devices

Ambient conditions

OEM-specific parameters

Daily fuel usage and hours

Trip fuel usage and hours Idle time-limit exceeded

Fault conditions

Diagnostic messages reported via DM1

Max and Min on monitored conditions

Support Modbus Slave and Master protocol

External modems via pass-thru Support OEM-specific communication

General Purpose Inputs

Up to 4 digital (closure to ground or powered) inputs 3 Analog inputs - voltage, ma

2 Relay outputs (1A @ 12 VDC)

Bluetooth Bluetooth Low Energy

Bluetooth 5.0 compatible

Accelerometer 3-axis

Electrical Operating power: 6-36 VDC

Sleep mode - less than 15 mA @ 12 VDC Monitoring mode - 40 mA @ 12

VDC LTE transmit mode - 400 mA peak @ 12 VDC

Messenger BLE

Physical Characteristics 5.00" x 4.63"

2 8-pin M12 (1 male, 1 female) connectors for power and I/O

Industrial temperature range -40°C to +85°C

Watertight industrial enclosure

Extreme low power mode for battery-powered applications **Power Management**

Internal power for last-gasp reporting and power up through short brown outs

Geofencing Automatically placed when stationary, radius-based or rectangular

One-year limited warranty Warranty

FCC, IC, PTCRB and ATT approvals for end-user applications RoHS compliant Certifications

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