QRT02

GSM / GPRS / GPS fleet management device

Main Features:

- GPS an GSM modules embedded;

- microSD card slot (128 Mb memory card can save 244 000 records);

- Wide supply voltage range (10 – 36 Volts);

- Firmware and configuration update via QRT-Bootloader (locally) or GPRS (remote);

- Dynamic packet size and sending cycle;

- TCP protocol support;

- SMS remote control.

Communication interfaces, I/O ports:

- CAN-BUS, CAN-FMS also other automotive standards;

- Up to 2 temperature sensors, Dallas iButton reader over 1-wire;

- Fuel level sensor - standard RS485;

- 4 digital inputs;

- 2 analog inputs (0...30 V);

- 2 digital output (controlled by SMS commands);

- 1 counter input / RPM input.

Description:

QRT02 recorder is a device that is about the size of a deck of cards, which is designed to locate objects. It is equipped with GPS and GSM modules which give ability to read and send device location data to server. Moreover to the basic function of location, it has various inputs and outputs. That gives an opportunity to acquire and register parameters of monitored object or vehicle. Device works with: CAN BUS interface, digital temperature sensors, driver ID (Dallas iButton), digital fuel sensor.

Device and components:

1. QRT02 device

2. GPS antenna

3. GSM antenna

4. W24-QRT02 bunch

5. Bunch with reed relay

6. ORT-Bootloader interface (not included with device)

Main parameters	
Power supply	10...36 V
Power consumption while sending data via GPRS class 10	80 mA
Power consumption during normal work	50 mA
Power consumption in sleep mode	≈20 mA (depends on configuration)
Internal memory (optionally)	8.125 records or 244.000 with MicroSD card 128MB ATP
Operation temperature	-30...+85 ℃
Humidity	95%
Enclousure dimensions (lenght,width,height)	70 mm x 55 mm x 21 mm
Enclousure material	ABS
Device weight	80 g (without accumulator and GPS/GSM antennas)
International Protection Rating	IP40
I/O ports	
Ignition input	1 input (0...36 V)
Universal digital inputs	4 inputs (0...36 V)
Counter input /RPM input (W connector of alternator)	1 input (5...36 V, trigged by rising edge)
Analog inputs	2 inputs (0...30 V)
Control outputs	2 outputs (open collector type, max. 100mA)
Fuel level sensor supply output	1 output (12/24 V, 50 mA)
Serial ports	
UART, 0-3V logic for device configuration	1 port
RS-485 for fuel level sensor	1 port
1-wire for temperature sensors DS18B20	2 port (1 if iButton reader is used)
1-wire for Dallas iButton reader	1 port
CAN-Bus (33-500kBit/s, 300 car models supported)	1 port (CAN-H and CAN-L)
GSM module	
Manufacturer, product type	Quectel / M66
GSM/GPRS bands	850/900/1800/1900MHz
GPRS channels	12
GPRS class	B
GPS module	
Manufacturer, product type	Quectel / L70
Number of channels	22
Sensivity	-163 dBm
Positioning tolerance	3 m
Hot start	1 sec
Cold start	35 sec