



- Real time process monitor
- Highly configurable data sending
- Firmware update via GPRS or Mini USB
- Any element event triggers
- ECO Driving

## PHYSICAL PROPERTIES

|                |               |
|----------------|---------------|
| Dimensions, mm | 111 x 75 x 25 |
| Connector      | IO 1 - 10pin  |
| Indication     | 2 LEDs        |
| Housing        | Plastic       |

## PRODUCT FAMILY

- ◆ ECO4/ECO4+
- ◆ **ECO3**
- ◆ PRO4
- ◆ PRO3
- ◆ TCO4
- ◆ TCO3

## CONTACTS

+370 5 272 65 70

info@ruptela.lt

www.Ruptela.lt

## Electrical specification

|                   |              |
|-------------------|--------------|
| Power supply      | 10 - 32 V DC |
| Power consumption |              |
| Deep sleep mode   | 20 mA*       |
| Normal mode       | 110 mA       |

### Protections

- Short circuit protection
- Reverse polarity protection
- Electrostatic discharge protection on USB
- Electrostatic discharge protection on sim card slot

\* For firmware lower than 2.33, consumption might be different

## Telecommunication, Positioning

|                               |                      |
|-------------------------------|----------------------|
| <b>GPS\GLONASS module</b>     | Ublox MAX-7C         |
| Internal                      |                      |
| 56 channel                    |                      |
| Sensitivity                   | -161 dBm             |
| Cold start                    | 29 s                 |
| Aided start                   | 5 s                  |
| Reacquisition                 | 1 s                  |
| <b>GPS antenna</b>            | External             |
| Frequency                     | 1575.42 ± 3 MHz      |
| <b>GSM modem</b>              | SIM900 or SIM900r    |
| Internal                      |                      |
| GSM850\GSM900\DCS1800\DCS1900 | GSM900\DCS1800       |
| <b>GSM antenna</b>            | Internal             |
| GSM850\GSM900\DCS1800\DCS1900 | GSM900\DCS1800       |
| <b>Accelerometer</b>          | 3-axis; 2g/4g/8g/16g |

## IO Characteristics

|             |                              |
|-------------|------------------------------|
| 4 x DIN     | Digital inputs               |
| Threshold   | 4 V                          |
| 2 x DOUT    | Digital outputs              |
| Max output  | Open collector 32 V, 1 A max |
| 2 x AIN     | Analog inputs                |
| Input range | 0 - 30 V                     |
| USB         | Configuration interface      |

## Environmental data, reliability, certification

|   |                            |
|---|----------------------------|
| Storage temperature   | -40 - +65                  |
| Operating temperature   | -35 - +55                  |
| <b>Essential requirements</b>   | <b>Confirmed standards</b> |
| Safety  | EN 60950                   |
| R&TTE, Article 3.1(a)   | 1:2006+A11:2009            |
| EMC   | EN 301 489-1 V1.6.1        |
| R&TTE, Article 3.1(b)   | EN 301 489-7 V1.3.1        |
| Radio Spectrum  | EN 301 511 (v9.0.2)        |
| R&TTE, Article 3.2  |                            |
| Environmental testing. Part 2-64. Tests – Test Fh: Vibration, broadband random and guidance (IEC 60068-2-64:2008) | LST EN 60068-2-64:2008     |

## Peripherals available

- Available on AINs**
- Analog temperature sensors
  - Analog fuel sensors