owa11A

TRACKING AND TELEMETRY PLATFORM

The owa11A platform is an optimized, fully featured vehicle, asset tracking and telemetry unit. Its design has been the result of the experience of Owasys with over 100.000 units on feld during last 12 years. The owa11A is an ideal product for a wide range of applications as Transport & Logistics, Security & Surveillance, Trailer Tracking, Insurance Rental, Caravans,etc....

Full-featured asset and vehicle tracking platform

- Fully configurable functionality.
- OTA update capability for confguration and frmware.
- Quad band GSM/GPRS (integrated antennas).
- Optional HSPA+ module.
- Cell ID information provided.
- Nominal Range from 6 to 30 VDC
    High Capacity 1800 mAh integrated back-up battery.
- Internal 3-axis accelerometer.
- Owa11A 2 I/Os each configurable as:
    - Digital Inputs
    - Digital Outputs
    - Analog Inputs
- Owa11A-T
    - 1-wire interface for sensors (temp, humidity...)
    - Power output 4.4V
- Waterproof housing IP67.
- CE certified/ROHS.
- Fully designed and manufactured in EU.

The owa11A has been designed in a compact size with GPS (GLONASS) and GPRS internal antennas focused to simplify the installation. The large 1800 mAh battery combined with the different sleep modes provide the customer with a long time period of reporting on battery power.

Improved M2M communication technology

MQTT based: lightweight publish/subscribe messaging protocol well suited to work in the mobile environment.

MQTT features:
- fast response and throughput.
- low battery and bandwidth usage

MQTT is a perfect ft for use cases where:
- connectivity is intermittent.
- bandwidth is at a premium.
- an enterprise application needs to interact with one or more devices.
- devices need to send data fast and reliably without requiring code retry logic.

MQTT allows the deployment of devices to all environments, private and NAT-ed networks.

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Advanced Wireless Devices

owa11A

TECHNICAL SPECIFICATIONS

- **Interfaces**
  - 1 bi-colour Status LED
  - Movement Sensor

owa11A
  - Two I/Os each confgurable as:
    a. Digital Input (Maximum input voltage 50V)
       LOW = 0 - 2.5V, HIGH = 5 - 50V
    b. Digital Output open collector 100mA *
    c. Analog Input, 2 Ranges 0-5V or 0-30V
    *Factory option in IO1 for High side output 1A.

owa11A-T
  - 1-wire interface for sensors (temp, humidity...)
  - Power output 4.4V

  *NOTE: Optional

- **Power Supply**
  - Nominal Range: 6 V a 30 V.
  - Typical current consumption@12v:

Off: Acc + Inputs	670 uA
STANDBY: GSM + Acc + Inputs	3,8 mA
RUN: GPRS + GPS + Acc + I/Os	42 mA

Wakeup reasons	
Off:	Accelerometer, power fail, digital inputs, RTC
STANDBY:	Accelerometer, power fail, digital inputs, GSM (call or SMS), RTC

- **Battery**
  - Back Up Battery Li-Ion 3.7V 1800 mAh.

- **Temperature**

Operation Temperature	-20°C to +60°C
Battery Charge	0°C to 45°C
Storage Temperature** (1 month)	-5°C to +35°C
Storage Temperature** (3 months)	0°C to +35°C

  ** NOTE: Storage Temperature limited because of Li-Ion battery.
  After 3 months, battery should be charged to 40-50% of capacity and storaged at ambient temperature 25± 5ªC, 65±20% RH for 12 months. After 12 months a complete charge/discharge cycle should be carried out.

- **GSM/GPRS (Internal antenna)**
  - GSM850 + EGSM900 + GSM1800 + GSM1900
  - Class 4 (2W) GSM850/EGSM900
  - Class 1 (1W) GSM1800/GSM1900
  - GPRS Clasd B, Clasd 10 (4+2)
  - SMS (MT/MO)
  - Supports multiplexed communication, allowing GSM and SMS events during GPRS sessions
  - UMTS Class 3 (250 mw) for WCDMA FDD BandII(1900)*
  - UMTS Class 3 (250 mw) for WCDMA FDD BandV(850)*

  *NOTE: Optional HSPA+ Module

- **GPS (Internal antenna)**
  - 56-channels
  - GLONASS (Optional)
  - SBAS: WAAS, EGNOS, MSAS
  - Precission: 2.5 meters CEP
  - Signal Adquisition:
    Cold Start: 29 sec
    Aided Start: 5 sec
    Readquisition: 1 sec

- **Mechanics**
  - Plastic
  - Dimensions: 101x61x30 mm
  - Weight: 190 gr
  - Power Supply Cable+ I/O*
  - Fixation with adhesive

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