

owa2X family

owa21A-TRACK

TRACK AND TRACE APPLICATIONS

YOUR FLEET VEHICLES AND ASSETS ALWAYS TRACKED AND TRACED.

LOW POWER MODE SOLUTIONS AND BATTERY TO ALLOW LIVE TRACKING DURING DAYS. SUITABLE FOR ANTI-THEFT APPLICATIONS.

ALL THE EXPERIENCE OF THE owa2X PRODUCTS FOCUSED IN A SPECIALIZED PRODUCT FOR TRACKING APPLICATIONS.

- GPRS Class B, Class 10 (4+2), GSM dual band 900/1800.
- GPS integrated. WAAS and EGNOS support.
- TCP/IP stack for transparent Internet Connection.
- Movement sensor.
- Tamper-proof SIM card.
- Dedicated internal battery for Real Time Clock and GPS.
- Based on owa2X SW architecture
- Compact Size.
- Application software upgradeable over the air.
- Designed for Ultra Low Power Applications

Your reference partner for wireless communication nodes!



55 mm. (L)

27 mm. (H)

106 mm. (W)

owasys

Advanced Wireless Devices

TECHNICAL SPECIFICATIONS

GENERAL SPECIFICATIONS

- Power Supply:
 - Nominal Voltage Range: 6 to 36 Vdc.
- Interfaces:
 - Power Supply.
 - 4 Digital Inputs, 3 Digital Outputs, 1 Power Output
 - Power ON/OFF input signal.
 - Audio IN/OUT.
 - RS-232 Serial Port.
 - Secondary UART.
 - GSM and GPS antenna connectors.
 - 1 Odometer⁽¹⁾ input.

(1) Multiplexed with one of the digital inputs.

- Approvals
 - CE Marking.
 - e-marking.
- Power Consumption-Typical Average @ 12V

Zero Power Mode	4 μ A
Low power mode	2 mA
Sleep ⁽²⁾	6 mA
Run ⁽³⁾	180 mA

(2) GSM camping and CPU i sleep.

(3) GPS Running and GSM transmitting at maximum power.

- External LEDs for information and internal Movement Sensor.
- RTC and GPS with dedicated battery, 1 month autonomy at 25°C.
- Temperature Ranges:

Operating (Fully GSM compliant)	-20°C to +70°C
Operatiq with GSM OFF	-40°C to +85°C
Storage	-40°C to +85°C
With internal battery back-up accessory. ⁽⁴⁾	-20°C to +60°C

(4) Allowing battery discharge.

FIRMWARE SPECIFICATIONS

- 32 bits RISC ARM7 core up to 60 MIPS (Dhrystone 2.1) at 70 Mhz.
- Linux OS (Kernel v.2.4.18).
- TCP/IP Stack
- Memory:
 - 8 Mbyte FLASH
 - 16 Mbyte RAM
- Application Programming Interface for:
 - Owa21A control.
 - Power management.
 - GSM/GPRS.
 - Internet connection.
 - Controlling all the interfaces: I/Os.
 - GPS.
 - Movement Sensor
- Multiplexed communication supported with GSM/GPRS modem allowing GSM events and SMS during GPRS connection.

GSM/GPRS SPECIFICATIONS

- EGSM 900 / GSM1800.
- Power Output at 900 MHz: 2W.
- Power Output at 1800 MHz: 1W.
- GPRS Class B, Class 10 (4+2).
- Audio and CSD Data calls.
- SMS (MT/MO).

GPS SPECIFICATIONS

- Receiver: L1 frequency, 16 Channel.
- Update Rate: > / = 4 Hz.
- Accuracy: 2.5 m CEP (Circular Error Probability).
- Signal Acquisition:
 - Cold Start: 34 sec.
 - Warm Start: 33 sec.
 - Hot Start: < 3.5 sec.
 - Aided Start: 5 sec.
- Signal Reacquisition: < 1 sec.
- Power supply for active antenna.: + 3 Volt @ 30mA current

MECHANICAL SPECIFICATIONS

- Dimension (mm): 106 (W) x 27 (H) x 55 (L).
- Weight < 170gr (plain device with no accessories).
- Material: Aluminum anodized.
- Connectors:
 - GSM: FAKRA D Plug.
 - GPS: FAKRA C Plug
 - AMP Micro Mate-N lock 14 pins.
 - RS-232 DB-9 (Female).
 - Molex Mini-fit 6 pins.
 - Tamper-proof SIM card holder.

UNIVERSAL DEVELOPMENT KIT

- A development kit is available, including:
- GSM/GPRS, GPS and Bluetooth antennas.
 - Developer's board.
 - Power supply cables.
 - Cables for interfaces.
 - CD with: Cross compiler, API's library, manuals, and application notes.
 - Wall-plug to supply the owa21X and Development Board.

RELATED PRODUCTS AND ACCESSORIES

- Internal Battery back-up accessory 1000mAh
- owa211-Telemetry.
- owa2X products.