

Sycada Smart & Green Telematics Pro V Wireless Embedded Gateway



OWA4X CORE:

- LINUX Kernel 4.14.67
- Debian 9 Distribution File System
- ARM Cortex A8 32 bit 800MHz
- 512MB DDR3
- 1GB NAND Flash
- Access to Debian Standard Repositories

KEY FEATURES:

- IP40 Enclosure
 - CAN (up to 4 interfaces)
 - Kline (up to 2 interfaces)
 - RS485 (up to 2 interfaces)
 - Programmable 3 Axis Accelerometer
 - TPM 2.0
 - 8 digital output open drain 200mA
 - 2 digital output high side 1A.
 - 10 digital input 0 to 50V.
 - 3 additional optional digital input.
 - 4 analog input, 0 to 5.12V or 0 to 30.72V
 - 5V voltage output
 - 3 RS232 (TX, RX) interface
 - Ethernet 100Mbps
 - RJ45 or M12 connector
 - MicroSD
 - Micro SIM
 - USB 2.0
 - Programmable 9 Axis sensor (optional) Accelerometer/Gyroscope/Magnetometer.
- @ debian
Corte

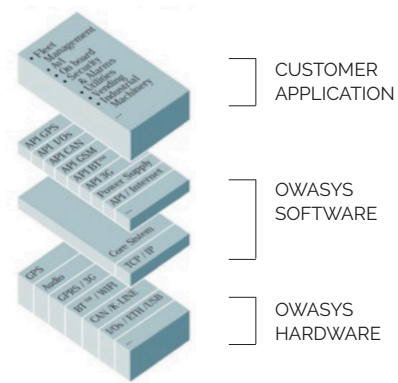
WIRELESS INTERFACES:

- GNSS (GPS + GLONASS)
CELLULAR COMMUNICATIONS
- LTE Cat 1 with 3G and 2G fallback
 - Region: Global (Worldwide)
 - WiFi 802.11 a/b/g/n/ac
 - BT 4.2

WIRELESS EMBEDDED COMPUTER

- IP40
- 150mm x 94mm x 32mm

WIRELESS EMBEDDED COMPUTER



CPU

- ARM Cortex A8 at 800MHz clock speed.
- Linux Kernel 4.14.67
- Debian File System
- NAND FLASH 1GByte.
- DDR3 512MBytes.
- MicroSD card holder for additional storage.

GNSS

- Receiver: GPS/GLONASS/GALILEO/QZSS/BeiDou.
- 72-channel continuous tracking receiver.
- SBAS: WAAS, EGNOS, MSAS, GAGAN.
- Update Rate: up to 10Hz.
- Accuracy: 2 meters CEP.
- Signal Acquisition: Cold Start: 26 s. Hot Start: < 1.5 s.
- Signal Reacquisition: < 1 s.
- Active Antenna Power Supply: +3.3V

LTE Cat 1 with UMTS/HSPA and GSM fallback

- LTE Cat 1 Twelve band. 700 (Bd12 <MFB1 Bd17>, Bd28) 800 (Bd18, Bd19, Bd20) 850 (Bd5) / 900 (Bd8) / AWS (Bd4) / 1800 (Bd3) / 1900 (Bd2) / 2400 (Bd1) / 2600 (Bd7)
- UMTS/HSPA+: Seven band. 800 (BdXIX) / 850 (BaV) / 900 (BaVIII) / AWS (Bd) / 1800 (BdIX) / 1900 (BdII) / 2100MHz (BdI)
- GSM/GPRS/EDGE: Quad band 850/900/1800/1900MHz
- DL 10.2Mbps, UL 5.2Mbps
- GPRS Class B, Class 12 (484).
- No standard voice calls support, calls must be done using a SIP client.

INTERFACES

- Up to 4 CAN bus
- 2 CAN bus supporting full speed 1Mbps CAN 2.0B.
- 2 CAN FD supporting 8Mbps
- Up to 2 K-line bus.
- Integrated sensors.
- Programmable 9 axis sensor, accelerometer, gyroscope and magnetometer. TPM 2.0
- 10 configurable digital input/outputs:
- 50V max inputs (logic low <1.5V, high >3V).
- All inputs function as wake signals for low power modes.
- All inputs can be used as counters (odometer). 32bit, 3KHz max.
- 8 open collector outputs (100mA each).
- 2 high-side switches to Vin for output (1A each).
- Short-circuit protection for all outputs.
- Optional 3 extra digital inputs in expansion connector.
- 4 analog inputs:
- 12 bit resolution, 1% accuracy.
- Multiplexed with digital I/O pins.
- 0-5.12V (5mV per bit) or 0-30.72V (30mV per bit) configurable by sw
- Maxim 1-Wire.
- microSD card holder.
- USB Host 2.0
- 3 external RS232 ports. 6 pins configurable by SW as follows:
- 3 x (TX/RX) or
- 1 x (TX/RX) & 1 x (TX/RXICTS/RTS)
- Up to two RS485 port
- Ethernet 10/100 BaseT.
- Vout 5V power output (500mA max).
- FAKRA antenna connectors.
- 4 LEDs for status indication.
- Audio CODEC for external microphone and speaker.

* Availability of features depends on models.

POWER SUPPLY

- Nominal range of 9V to 48V.
- Typical consumption at 24V:

OFF	0.335 mA
Standby	9.88 mA
RUN	47 mA
RUN + GSM + GPS	73 mA

BATTERIES

Back-up when there is no power supply available.

- Standard backup battery for TC. Duration 10 years.
- Optional rechargeable Li-Ion 3.7V.

Inserted via rear battery cover.

TEMPERATURE

Safety Purposes Operating Temperature Range without L-ion Battery	40 °C to 75 °C
Safety Purposes Operating Temperature Range with Li-ion Battery	40 °C to 55 °C (from external power supply) -20 °C to 55 °C (battery can power the unit) 0 °C to 45 °C (battery will be charged if external power available)

*Industrial temperature range components -40 °C to 85 °C

RUGGED ENCLOSURE

- Environmental protection to IP40 standard. (protection against dust).
- Dimension: L=150 x W=94 x H=32 mm
- Weight: 254g
- Material: PC+ABS.
- System connectors: Molex Microfit 24 way 43045-2400
- MicroSIM
- MicroSD
- Ethernet RJ45 or M12





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