

owa344l



Implement a telemetry system that allows you to have remote access to your machines from a single point of control

IoT Embedded Linux Platform

owa344l Core:

- Yocto Project File System
- ARM Cortex A7 32 bit 792MHz
- 512MB DDR3
- 512MB NAND Flash
- Optional 8GB EMMC

Key Features:

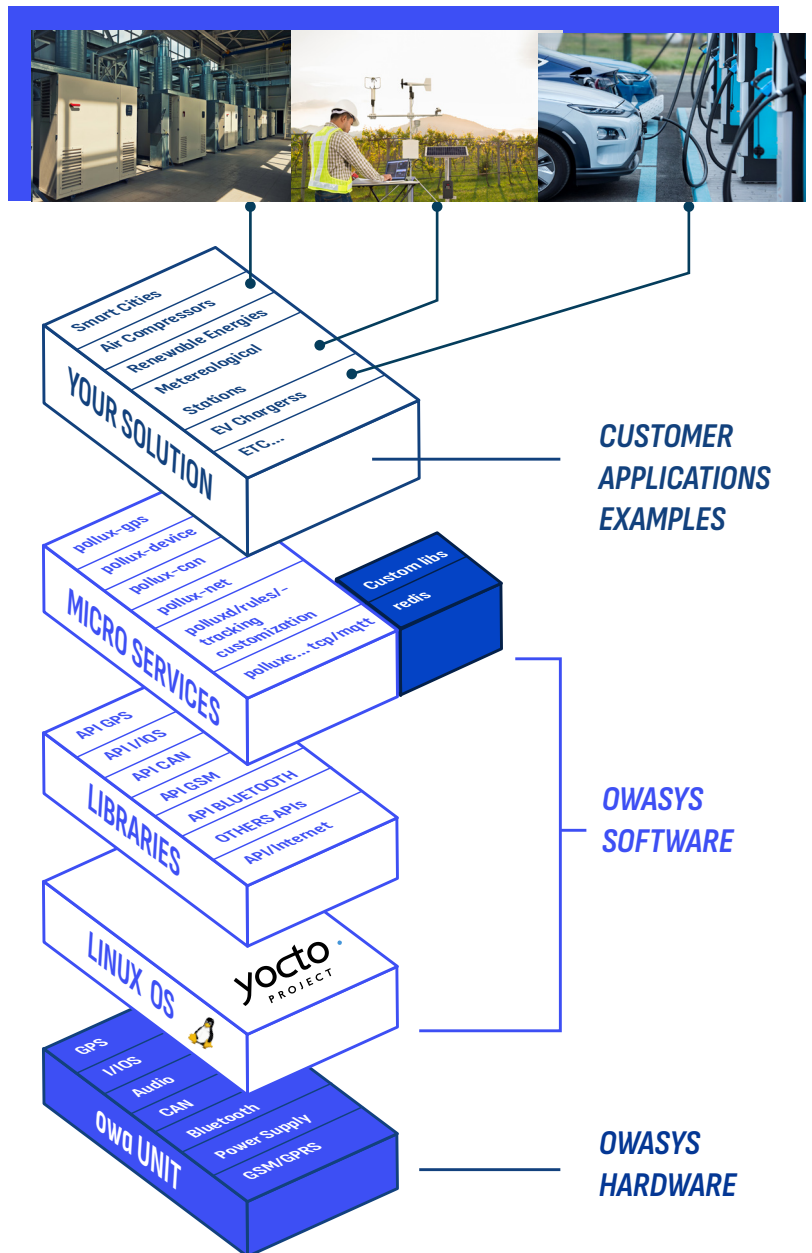
- 2 Ethernet 10/100Mbps - RJ45
- RS485 (up to 2 interfaces)
- USB 2.0
- 2 RS232 (TX, RX) interface
- 6 digital output open drain 200mA.
- 2 digital output high side 1A.
- 9 digital input 0 to 50V.
- 4 analog input, 0V to 30V.
- 5V voltage output
- Nano SIM or MFF2
- Low Power Modes
- TPM 2.0 (Optional)
- Secure boot
- IP40 Enclosure

Wireless Interfaces:

- CELLULAR COMMUNICATIONS
- LTE Cat 1 bis with 2G fallback
 - EXTERNAL ANTENNA SMA CONNECTOR

Mechanics

- IP40
- 114mm x 85mm x 32mm (excluding DIN Rail Fixing)



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Time to wireless!!

BOK 000 3010-E_owa344l Datasheet

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HMS GROUP MEMBER



CPU

- ARM Cortex A7 at 792MHz clock speed.
- Yocto Project File System *
- DDR3 512MB RAM
- NAND FLASH 512MB
- Optional EMMC 8GB for additional storage
- Optional TPM 2.0

* For more information about OS and kernel, visit our Developers' zone or contact your Owasys Account Manager.

LTE Cat 1 bis with 2G fallback

- LTE-FDD bands: B1/B2/B3/B4/B5/B7/B8/B12/B13/B17/B18/B19/B20/B25/B26/B28/B66
- LTE-TDD bands: B34/B38/B39/B40/B41
- GSM/GPRS/EDGE: Quad band
- DL 10M bps, UL 5 Mbps
- GPRS multi-slot Class 12.
- LTE-TDD: Max 130 Mbps (DL), Max 30 Mbps (UL)

Interfaces

Two Ethernet 10/100Base-TX.

- Up to two RS485 port
- 2 external RS232 ports. 6 pins:
 - 1 x (TX/RX/CTS/RTS) Console
 - 1 x (TX/RX)
- Maxim 1–Wire
- USB Host 2.0
- Configurable digital input/outputs:
 - 9 INPUTS:
 - 50V max inputs (logic low <1.5V, high >3V).
 - 7 inputs function as wake signals for low power modes
 - All inputs can be used as counters (odometer). 32bit, 3Khz max.
 - 6 open collector outputs (200mA each)
 - 2 high-side switches to Vin for output (1A each)
 - Short-circuit protection for all outputs
- 4 analog inputs:
 - 12 bit resolution, 1% accuracy
 - Multiplexed with digital I/O pins
 - 0–30V range
- Vout 5V power output (500mA max)
- SMA antenna connector
- 4 LEDs for status indication

* Availability of features depends on models

Options

See DESI-BOK 000 3012 for product variants and options.

Power Supply:

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

OFF	320 uA
Standby	9,53 mA
RUN + ETH0 + ETH1	50,50 mA
RUN + GSM + ETH0 + ETH1	68,10 mA

Batteries

Back-up when there is no power supply available

- Standard backup battery for RTC. Duration 10 years
 - Optional rechargeable Li-Ion 3.7V.
- Inserted via rear battery cover

Temperature

Safety Purposes Operating Temperature Range without Li-ion Battery	-40 °C to +73 °C*
Safety Purposes Operating Temperature Range with Li-ion Battery	-40 °C to +53 °C (from external power supply) -20 °C to +53 °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

** (-40 °C to -20 °C internally limited with battery protection during discharge)

Enclosure

- Environmental protection to IP40 standard
- Dimension: L=120,60 x W=85 x H=32 mm. (With the DIN Rail fixing)
- Weight: 175 gr.
- Material: PC+ABS
- System connectors: Molex Microfit 24 way 43045-2400
- NanoSIM
- 2 Ethernet RJ45

Development Kit (POP 000 3100#UDK)

Includes: Developer's board owa344, power supply cables, cables for interfaces, antennas, web access to developers area: cross compiler, API, libraries, manuals and application notes.

