

owa344I

TAKE COMPLETE CONTROL OF REMOTE DATA COLLECTION AND PROCESSING
THE owa344I IS THE PERFECT PLATFORM FOR CONTROLLING AND MONITORING
YOUR INDUSTRIAL MACHINES

owa344I Core:

- Linux Kernel 5.10.72
- Yocto Kirkstone 4.0 File System
- ARM Cortex A7 32 bit 792MHz
- 512MB DDR3
- 512MB NAND Flash
- Optional 8GB EMMC

Wireless Interfaces:

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

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

Mechanics

- IP40
- 114mm x 85mm x 32mm (excluding fixing unit)



yocto
PROJECT

Cortex
Low-Power Leadership from ARM



owasys[®]

Member of the HMS group

owa344i

TECHNICAL SPECIFICATIONS

• CPU

- ARM Cortex A7 at 792MHz clock speed.
- Linux Kernel 5.10.72
- Yocto Kirkstone File System
- DDR3 512MB
- NAND FLASH 512MB
- Optional EMMC 8GB for additional storage
- Optional TPM 2.0

• 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.

• 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.

• 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=114 x W=85 x H=32 mm.
- 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.

• Options

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



owasys[®]

Member of the HMS group