

# owa22I-ETH

## WIRELESS EMBEDDED COMPUTERS WITH EHTERNET CONNECTIVITY FOR TELEMETRY

GSM/GPRS HARDWARE TERMINAL WITH OPEN SOFTWARE FOR THE DEVELOPMENT OF WIRELESS TELEMETRY APPLICATIONS IN INDUSTRIAL ENVIRONMENTS.

HIGHEST RELIABILITY IN DATA TRANSMISSION AND REMOTE CONTROL.

IT COMBINES LINUX OS, GSM/GPRS WITH EMBEDDED IP CONNECTIVITY AND LOCAL NETWORKING CONNECTIVITY VIA ETHERNET.

IT ENABLES IMMEDIATE ADDITION OF WIRELESS GSM/GPRS COMMUNICATION TO A REMOTE ETHERNET OR WLAN BASED TELEMETRY NETWORK.

- GPRS Class B, Class 8 (4+1), GSM dual band 900/1800.
- TCP/IP stack for transparent Internet Connection.
- Embedded IP routing and firewall capabilities.
- RS232, RS485, CAN, Audio, General Purpose analog and digital I/Os
- Ethernet 10baseT (10 Mbps).
- WLAN connectivity, by interfacing an external WLAN device via the Ethernet port.
- USB 1.1 compliant host.
- Back-up for Real Time Clock.
- Small Size.
- Application software upgradeable over the air.

*Now, remote devices at the control of your fingertips!*



168 mm. (W)

35 mm. (H)

55,25 mm. (L)

## TECHNICAL SPECIFICATIONS

### GENERAL SPECIFICATIONS

- Power Supply:
  - Nominal Voltage Range: 12 to 36 Vdc.
- Interfaces:
  - Power Supply.
  - 7 Digital Inputs, 5 Digital Outputs, 2 Analog Inputs.
  - Audio IN/OUT (2,5 W).
  - RS-232 Serial Port. RS-485 and CAN Ports.
  - Odometer Input.
  - GSM connector.
  - Ethernet 10baseT connector.
  - USB 1.1 host connector.
- Approvals
  - CE Marking.
- Power Consumption-Typical Average @24V

Off	0,2 mA
Deep Sleep	13 mA
Run (GSM voice call)	90 mA
Ethernet connected ( $\Delta$ )	7 mA
USB active ( $\Delta$ )	2 mA
Battery Recharge [1]	55 mA

(1) Only for owa22A/b-ETH

- Temperature:

Operating	-25°C to +55°C
Operating but not fully GSM compliant	-25°C to +70°C
Storage	-40°C to +70°C
Operation with battery back up [1]	-20°C to +55°C

(1) Only for owa22A/b-ETH

### 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
- Embedded routing and firewall capabilities.
- Memory:
  - 8 Mbyte FLASH
  - 16 Mbyte RAM
- Application Programming Interface for:
  - Owa22A control.
  - Power management.
  - GSM/GPRS.
  - Internet connection.
  - Controlling all the interfaces: I/Os.

### GSM/GPRS SPECIFICATIONS

- EGSM 900 / GSM1800.
- Power Output at 900 MHz: 2W.
- Power Output at 1800 MHz: 1W.
- GPRS Class B, Class 8 (4+1).
- Audio and CSD calls.
- SMS (MT/MO).

### MECHANICAL SPECIFICATIONS

- Dimension: 168 (W) x 35 (H) x 55,25 (L).
- Weight: < 360 gr.
- Material: Aluminium anodized.
- Connectors:
  - 1 SMA
  - Molex 24 pins P/N 90130-3124.
  - RJ45 for audio and secondary UART.
  - RS-232 DB-9 (Female)
  - Molex Mini-fit 6 pins P/N 39-30-1060.
  - Standard RJ45 Ethernet 10baseT connector.
  - USB type A receptacle connector.

### 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 applications notes.

### RELATED PRODUCTS

- owa22I/b-ETH: with battery back-up.
- owa22A-ETH: with GPS.
- owa22I/22A.
- owa22I/22A-BT: 100 meters Bluetooth™ and USB 1.1.

### OWASYS

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