

# owa2X Family

## WIRELESS EMBEDDED COMPUTERS FOR REMOTE MANAGEMENT

owa2X family of "Wireless Embedded Computers" provides an open, flexible and powerful platform offering fully wireless solutions for management of geographically distributed machinery.

owa2X units integrate GSM/GPRS communications with embedded IP functionality, allowing an efficient transmission of information across the cellular wireless network.

Local wired interfaces, such as Ethernet, analog and digital I/Os or serial and audio ports, and wireless interfaces like Bluetooth™ or WLAN, enable the different products of the platform to interface with a variety of accessories and perform wired and wireless networking. GPS is also available within the family.

Smart integration of state-of-the-art technologies and components, together with the embedded Linux OS, pave the way to easily build a wide range of powerful, highly reliable and cost efficient customer applications.

owa2X family provides the hardware that enables the rapid deployment of applications such us:

- Fleet Management.
- AVL-Automotive Vehicle Location.
- On board Telematic units.
- Security & Alarms.
- Energy Management, Utilities.
- Vending Machines.
- Elevators.
- Industrial Machinery.
- Telemetry and remote Supervision
- Optimized Logistics
- Extended Warehouse
- Banking ...

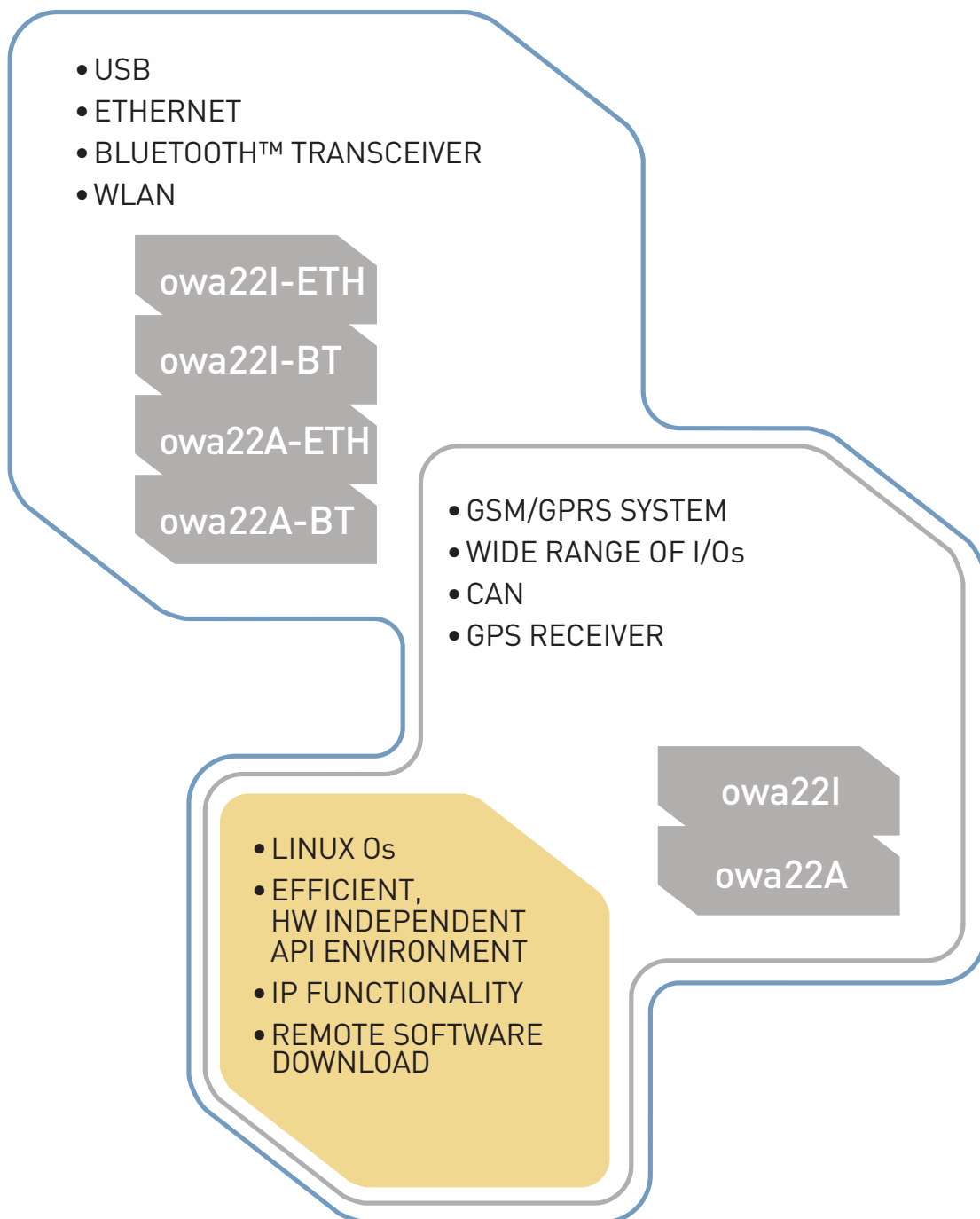
*Let us make the Hardware for Wireless Applications  
If you, as system integrator, use wireless technologies  
for your customer applications, just focus on adding  
value to your business and leave "us" the rest.  
Owasys, your partner for wireless!*

**owasys**

Advanced Wireless Devices

FULL COMPATIBILITY WITH YOUR APPLICATION  
AT ANY STAGE OF YOUR DEVELOPMENT.

## owa2X PLATFORM



# FEATURES AND BENEFITS



## LINUX OS

Due to its high reliability and robustness, Linux is the selected OS to avoid any failure in a management or monitoring platform which is ON 24/7. In addition, as an open standard, many freeware applications and tools are available.

## EFFICIENT, HW INDEPENDENT API ENVIRONMENT

Developers are now able to build powerful applications thanks to the memory and processing capabilities available in the Owa2X platform.

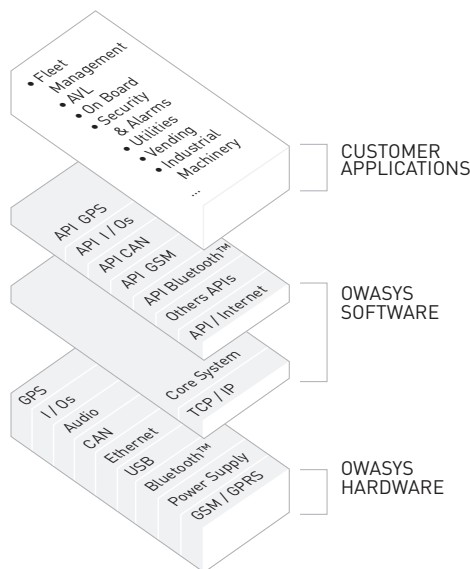
In order to manage the platform resources, a complete library of APIs for GSM/GPRS functions, Internet connection, management of the interfaces, GPS management and other services is offered. Thus, the developer does not have to worry about low level hardware and protocols, but only focus on the application by means of user-friendly APIs that reduce development times and increase the reliability of the application itself.

## IP FUNCTIONALITY

Owa2X works as an independent, autonomous IP node. Any device connected to the platform can display its status and information, so that it is accessible, any time, anywhere in the world via the Internet. Direct access to Internet significantly reduces costs and enhances efficiency, enabling a wide range of new wireless applications.

## REMOTE APPLICATION SOFTWARE DOWNLOAD

Owa2X enables remote upgrading of customer software applications over the air via GSM/GPRS network. This feature gives the opportunity of updating the application even when the device is already installed and running in the field.



## GSM/GPRS SYSTEM

General Packet Radio Service (GPRS) is a widely deployed value added service of the cellular infrastructure that enables direct access to public and private data networks (Internet, corporate networks, private networks...). GPRS involves overlaying a packet based air interface on the existing Circuit Switched GSM network, enabling resources to be allocated only when data is to be sent/received. Thus, data network usage is completely efficient and traffic costs are significantly reduced.

## WIDE RANGE OF I/Os

By offering audio, serial ports (RS-232, RS-485) and a set of generic analog and digital I/Os, the Owa2X platform allows a wide range of peripherals and sensors to be connected and monitored.

## CAN (CONTROLLER AREA NETWORK STANDARD)

Owa2X platform includes a standard CAN Bus interface that allows communication with distributed devices. The CAN standard allows low cost connectivity in environments such as automation, agriculture, maritime, construction, medical, factory automation, home automation...

## GPS RECEIVER

The GPS receiver provides accurate positioning and time information necessary for Location Based Applications, such as Fleet Management or Wireless Emergency Services. GPS is a satellite based positioning system with world wide coverage.



## USB

USB (Universal Serial Bus) is a wired high speed interface, currently available in many computers, and intended for connecting a host with multiple peripherals like printers, disk drives, cameras and many other application specific devices or dongles.

## ETHERNET

Ethernet is the most widely used standard for wired networking between computers. It is based on the IEEE 802.x family of standards.

## BLUETOOTH™ TRANSCIVER

Bluetooth™ is a short range wireless communications standard, operating in the 2, 4 Ghz, license free ISM band. The Bluetooth™ transceiver enables wireless connection to standard peripherals, like printers, PDA's, laptops, or headsets, and it is ideal for short range wireless supervision and data capture applications.

## WLAN

WLAN is an adaptation of the Ethernet standard for short range wireless networking. Owasys implementation is based on the IEEE 802.11 standard, operating in the 2, 4 GHz, license free ISM band.

## THE BASELINE RANGE

PRODUCT	EXAMPLE OF APPLICATIONS	MAIN FEATURES
owa22I	<ul style="list-style-type: none"> <li>• Long range Telemetry and Remote supervision in Industrial applications.</li> </ul>	<ul style="list-style-type: none"> <li>• Linux OS.</li> <li>• GSM/GPRS.</li> <li>• Embedded IP Functionality.</li> <li>• Remote application upgrade.</li> <li>• RS485, CAN, IOs.</li> </ul>
owa22A	<ul style="list-style-type: none"> <li>• Fleet Management.</li> <li>• Automotive Telematics.</li> <li>• Automotive Vehicle Location</li> </ul>	<ul style="list-style-type: none"> <li>• Linux OS</li> <li>• GSM/GPRS.</li> <li>• Embedded IP Functionality.</li> <li>• Remote application upgrade.</li> <li>• RS485, CAN, IOs.</li> <li>• GPS.</li> </ul>

## THE FEATURED RANGE.

Over the same platform, new products with additional features, providing more flexibility to access to a wider range of Applications.

PRODUCT	EXAMPLE OF APPLICATIONS	MAIN FEATURES
owa22I-ETH	<ul style="list-style-type: none"> <li>• Wireless long range Telemetry and Remote supervision in Industrial environments using Ethernet enabled devices.</li> </ul>	<ul style="list-style-type: none"> <li>• USB 1.1 host connectivity.</li> <li>• Ethernet 10baseT (10 Mbps, RJ45).</li> <li>• Embedded IP routing and firewall capabilities.</li> </ul>
owa22I-BT	<ul style="list-style-type: none"> <li>• Wireless long and short range Telemetry and Supervision (data and voice) in Industrial applications.</li> </ul>	<ul style="list-style-type: none"> <li>• USB 1.1 host connectivity.</li> <li>• 100 meters Bluetooth™ connectivity.</li> <li>• Bluetooth™ serial ports emulation.</li> <li>• Bluetooth™ voice applications.</li> <li>• Embedded IP routing and firewall capabilities.</li> </ul>
owa22A-ETH	<ul style="list-style-type: none"> <li>• Wireless onboard telematics gateway in Automotive environment.</li> </ul>	<ul style="list-style-type: none"> <li>• USB 1.1 host connectivity.</li> <li>• Ethernet 10baseT (10 Mbps, RJ45).</li> <li>• Embedded IP routing and firewall capabilities.</li> </ul>
owa22A-BT	<ul style="list-style-type: none"> <li>• Wireless onboard telematics gateway in Automotive environment</li> </ul>	<ul style="list-style-type: none"> <li>• USB 1.1 host connectivity.</li> <li>• 100 meters Bluetooth™ connectivity.</li> <li>• Bluetooth™ serial ports emulation.</li> <li>• Bluetooth™ voice applications.</li> <li>• Embedded IP routing and firewall capabilities.</li> </ul>

## OPTIONS

- Battery Back- Up.
- WLAN (only for "ETH" versions, via external WLAN dongle).

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Depósito Legal: BI-1603-03