



phos<sup>4.0</sup>  
software

## Wireless emergency lighting monitoring

The Phos 4.0 is the latest offering on wireless emergency lighting monitoring systems by Olympia Electronics.

The Phos 4.0 system is based on encrypted wireless communications between luminaires, offering complete monitoring of all connected luminaires with robust security from unwanted access.

The system is designed to be installed on all types of buildings, as each central unit can control up to 3200 luminaires via Wireless Gateways, thus enabling it to satisfy the needs of large installations.



[www.olympia-electronics.com](http://www.olympia-electronics.com)



*for a safer world!*



## I choose the wireless emergency lighting monitoring of Olympia Electronics

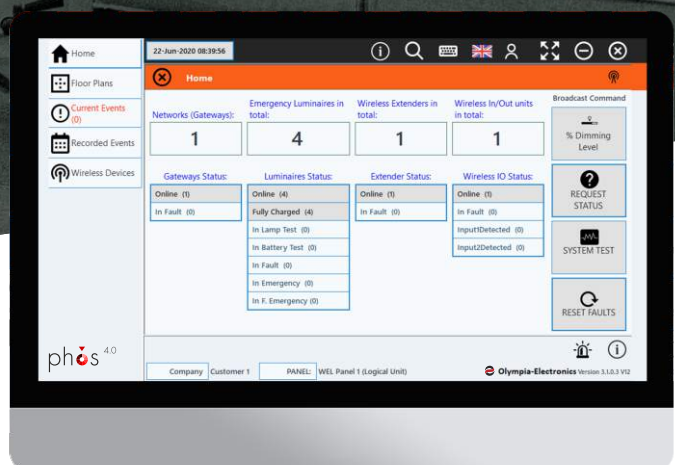
The Phos 4.0 wireless emergency lighting system combines the expertise and security achieved by Olympia Electronics' 40 years of emergency manufacturing experience with the flexibility and lower maintenance costs offered by a modern wireless system.

The Phos 4.0 wireless emergency lighting system offers complete monitoring of all connected wireless devices, collecting status information and issuing testing commands, without affecting the operation of the connected devices. Also, the system offers advanced connectivity options that enable it to connect to BMS systems via Modbus TCP.

The system preserves the ease of installation offered by self-contained luminaires, avoiding the need for specialized installation crews, as each luminaire only requires a local power supply. Furthermore, each wireless device operates as a separate node, receiving and transmitting the signal to neighboring devices, thus enabling the network to self-heal and bypass any malfunctioning nodes.

The Phos 4.0 wireless system:

- offers complete monitoring options of all connected devices without interfering with the installation and operation of self-contained luminaires.
- is resistant to network failures, as each wireless device is operating as a separate node.
- can connect to modern BMS systems, offering a complete overview of all installation luminaires.



# phos 4.0 software

The Phos 4.0 software enables the user to monitor and control up to 16 wireless gateways for a total of 3200 devices from a centralized location. The software offers complete monitoring capabilities of all connected devices, a complete installation graphical view, BMS connectivity via Modbus TCP, and robust notifications options.

# WIRELESS EMERGENCY LIGHTING MONITORING



The Phos 4.0 is an advanced wireless emergency lighting ecosystem, designed to satisfy all safety demands of a building while providing the ease of installation and maintenance of a modern, centralized wireless system.

The building block of the Phos 4.0 wireless system is the Wireless Gateway. Each Wireless Gateway can monitor up to 200 wireless devices, with the wireless connection between the devices established via a fast, mesh-type network, operating at 868 MHz, either directly or through another wireless device. The Wireless Gateway is available in three versions, USB, Wifi, and Ethernet, offering a wide array of connectivity options.



The Phos 4.0 software is the brains of the wireless system. The software is the one responsible for monitoring the connected wireless devices, performing preprogrammed tests, and notifying the results to the end-user via email or Modbus to a central BMS.

The Phos4.0 software has two separate versions: the Advanced and the Standard versions.

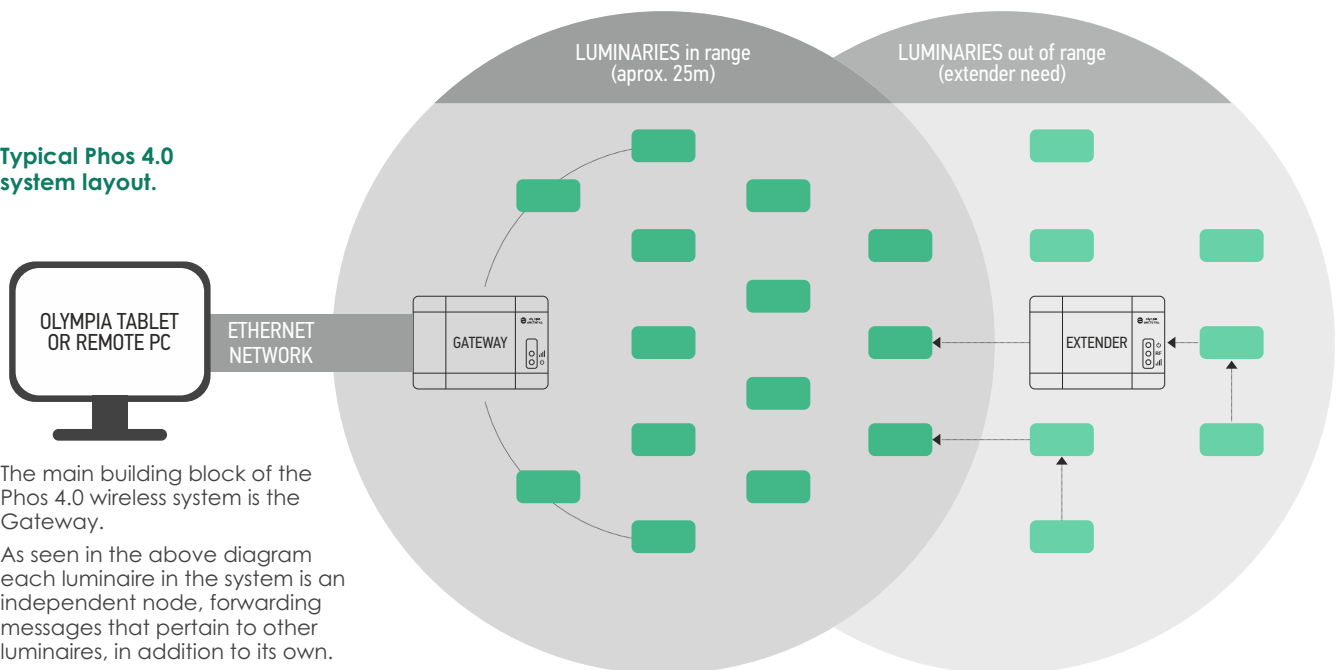
The Advanced version of the Phos 4.0 software offers the complete capabilities of the system, as it provides the user the ability to independently set up each Gateway as well as allowing the connection of up to 16 Gateways to a single central PC.

The Standard version of the Phos 4.0 software comes pre-installed on the GR-7610/V2 i-OLEG tablet. The GR-7610/V2 i-OLEG tablet can accept up to two USB

Gateways, which are automatically recognized by the software, thus greatly facilitating and simplifying the installation and commissioning procedures.

- ▶ Supports multiple Gateway versions (USB/Wifi/Ethernet)
- ▶ Multiple repeater support for remote system monitoring and control (Advance Version)
- ▶ Up to 16 Gateways (Advance Version)
- ▶ 200 Devices per Gateway
- ▶ 16 programmable digital zones
- ▶ Central Information Screen
- ▶ Multiple Floor plans with active device icons
- ▶ Current Events View
- ▶ Event Logging
- ▶ Email report
- ▶ Automated device search and installation
- ▶ Easy device separation in different gateway networks
- ▶ Automatic device categorization for instantaneous setup and updating
- ▶ Immediate information for each connected device

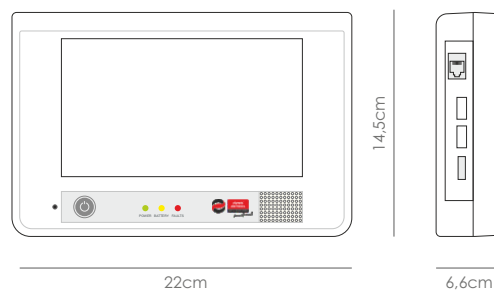
## Typical Phos 4.0 system layout.



The main building block of the Phos 4.0 wireless system is the Gateway.

As seen in the above diagram each luminaire in the system is an independent node, forwarding messages that pertain to other luminaires, in addition to its own.

The Extender enables communication with devices beyond the normal range of the nodes (20m-25m).



<b>Description</b>	GR-7610/V2 i-OLEG Olympia Electronics LumiGate
<b>Code</b>	923761001
<b>Consumption</b>	23VA
<b>CPU</b>	quad-core 1.8GHz
<b>RAM / FLASH MEMORY</b>	2GB / 32GB
<b>Display</b>	7" capacitive touch IPS display (1024x600)
<b>Battery</b>	SPA 6V/1.3Ah (Lead acid)
<b>Duration</b>	1h
<b>Mounting</b>	Wall or desktop

The GR-7610/V2 i-OLEG is the standalone control panel version of the wireless emergency lighting system. The i-OLEG is equipped with a 7" control touch screen and the backup battery offers 1h autonomy. The GR-7610/V2 comes with the Standard version of "Phos4.0" software pre-installed and can support up to 2 USB Gateways (GR-7607/V2 or GR-7605/V2).

**Features:**

- Status indication LEDs (Power, Battery, Fault)
- 1x Ethernet connection (Rj45)
- 2x USB connection
- 1x HDMI connection
- WiFi Connection (802.11 b/g/n)
- System buzzer (alert on system fault)

**Mounting methods**

Wall

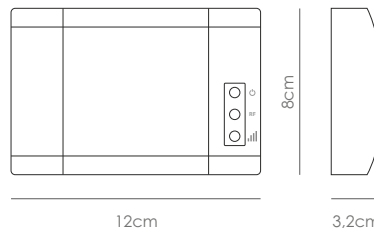


Desktop





GR-7603/V2  
GR-7604/V2



<b>Description</b>	GR-7603/V2 Ethernet/Wifi Gateway
<b>Code</b>	923760300
<b>Consumption</b>	2VA
<b>Max. Wireless Device Capacity</b>	200
<b>Tx power</b>	11dBm
<b>Wi-Fi Protocol</b>	802.11 b/g/n

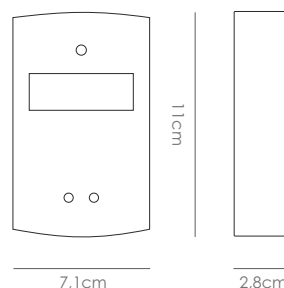
<b>Description</b>	GR-7604/V2 Network Extender
<b>Code</b>	923760401
<b>Consumption</b>	1,5VA
<b>Tx/Rx frequency range</b>	868 - 870MHz
<b>Tx power</b>	11dBm

The GR-7603/V2 Ethernet + Wifi Gateway is a Gateway (master) device for a wireless emergency lighting network. It provides Wi-Fi (WPA/PSK or WPS) and Ethernet connection options, with dynamic (DHCP) or static Ipv4 addressing, to be connected to the local network and communicate with the master control application (Phos4.0). The configurations are applied through a simple webpage (connect via mini Access Point). Capable of controlling up to 200 wireless devices. It is supplied via mains power (220-240V/50-60Hz) without self-contained backup operation. For uninterruptible operation a UPS power line must be used. Works exclusively with 'Advanced' version of "Phos4.0" software application.(with the use of PC).

GR-7604/V2 Network Extender is a signal range extension device, thus a signal repeater. It re-transmits received messages, similarly to wireless emergency luminaires (20~25m range). It is supplied via mains power (220-240V/50-60Hz) without self contained backup operation. For uninterruptible operation a UPS power line must be used.



GR-7605/V2

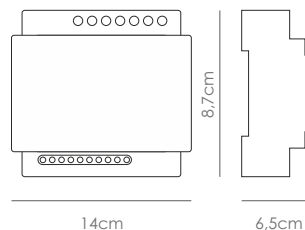


<b>Description</b>	GR-7605/V2 Rssi tester / USB gateway
<b>Code</b>	923760501
<b>Power supply</b>	4.9V to 5.1V (USB)
<b>Consumption</b>	0.7W / 0.14A (max)
<b>Battery</b>	3.6V / 240mAh NiMH (rechargeable, non-replaceable)

GR-7605/V2 RSSI Tester / USB Gateway main functionality is to be used as a handheld signal level measuring device during installation of wireless emergency lighting, to check signal coverage in a position, before installing a device. Can alternatively be used as a USB Gateway, a Spectrum Analyzer or a Manual Installation Tool (along with the 'Wireless Installation Tool' application).



GR-7606/V2



<b>Description</b>	GR-7606/V2 In/Out Wireless Unit
<b>Code</b>	923760601
<b>Consumption in standby mode</b>	6.1mA / 34.2 - 58.3mA
<b>Outputs</b>	2, relay 30V/1A, 125V/0.5A

The GR-7606/V2 Wireless I/O Unit is a device that can be used to bridge another (safety or monitoring) system with the wireless emergency lighting. It implements 2 relay outputs (dry-contact) that are programmable and can be armed in case of emergency, fault, test. The 2 inputs are also programmable and can be used to run a test procedure (lamp or battery).



GR-7607/V2

<b>Description</b>	GR-7607/V2 USB gateway
<b>Code</b>	923760700
<b>Max. wireless devices capacity</b>	200
<b>Tx/Rx frequency range</b>	868.150 - 868.450MHz
<b>Tx power</b>	11dBm

The "GR-7607/V2 USB Gateway" is a Gateway (master) device for a wireless emergency lighting network that connects to the master PC (or GR-7610/V2 i-OLEG) via a USB port. It is capable of controlling up to 200 wireless devices. Power supplied via USB. Intended for 'Standard' version and smaller scale installations, for easier commissioning and usage.

spare parts



GR-6600/WL/V2



GR-6601/WL/V2

<b>Description</b>	GR-6600/WL/V2 Spare wireless adapter for emergency luminaires	GR-6601/WL/V2 Spare wireless adapter for emergency luminaires (with SMA connector)
<b>Code</b>	923660007	923660100

The GR-6600/WL/V2 Spare WL module for emergency lighting is a device that is connected to any self-contained emergency luminaire by Olympia Electronics, in order to be connected to a Wireless Emergency Lighting network. The wireless luminaire is stated as a "router" device and is connected to a Gateway.



# Fast & easy installation.

Below there are indicative series of luminaires with wireless communication.

Olympus LED



Spot Light



Eco Light



Tetragono Light



[www.olympia-electronics.com](http://www.olympia-electronics.com)

European manufacturer



The company is certified by

APPROVAL  
**SWISS**  
Objectively True  
ISO 14001, ISO 45001, ISO 9001