

PALS™



Addressable Emergency Lighting

Regular testing and maintenance of emergency lighting systems is essential and is now a legal requirement in many countries. It is possible to carry out testing manually but this can be expensive and time consuming and accurate record keeping difficult to arrange. PALS is a Programmable Addressable Lighting System that will automatically test and monitor the emergency lighting system and produce accurate reports of test results and system events. It ensures building owners and occupiers are informed promptly of any problems effecting the emergency lighting system and as the system can be networked and remotely accessed, off-site monitoring also becomes an option.

Key features include:

- Each PALS panel is fully expandable from 1 to 5 loops using plug-in line drivers
- To allow for future expansion, specify 100 devices per driver (Maximum 126) can be supported by each line driver card allowing one panel to monitor and test 630 devices
- A total of 95 PALS panels can then be networked to allow a total system size of 59,850 devices
- A range of interface units allow the system to operate with most types of emergency luminaires including self-contained, central battery and static inverter systems
- User friendly software with auto device learn and data loop status for trouble free setting-up, commissioning and fault finding
- Constant communication with luminaires to prove system integrity
- Reports charger or mains supply failure within 60 seconds of the event
- Loops, zones and luminaires can be disabled to carry out maintenance work
- Carries out daily, weekly, quarterly and annual tests – fully automatically - or to customers requirements
- Full system and luminaires test can be manually activated at any time
- Reports luminaire number, location and nature of the fault detected
- On-board power supplies on the panel to maintain memory if power fails
- Designed to fail safe whatever event occurs
- Easy to use, tab style questions for programming and operating, On-board alpha numeric keyboard for easy updates and modifications
- External printer available
- Multi panel networking, modem communications and PC report and control
- Complies with the requirements of EN62034

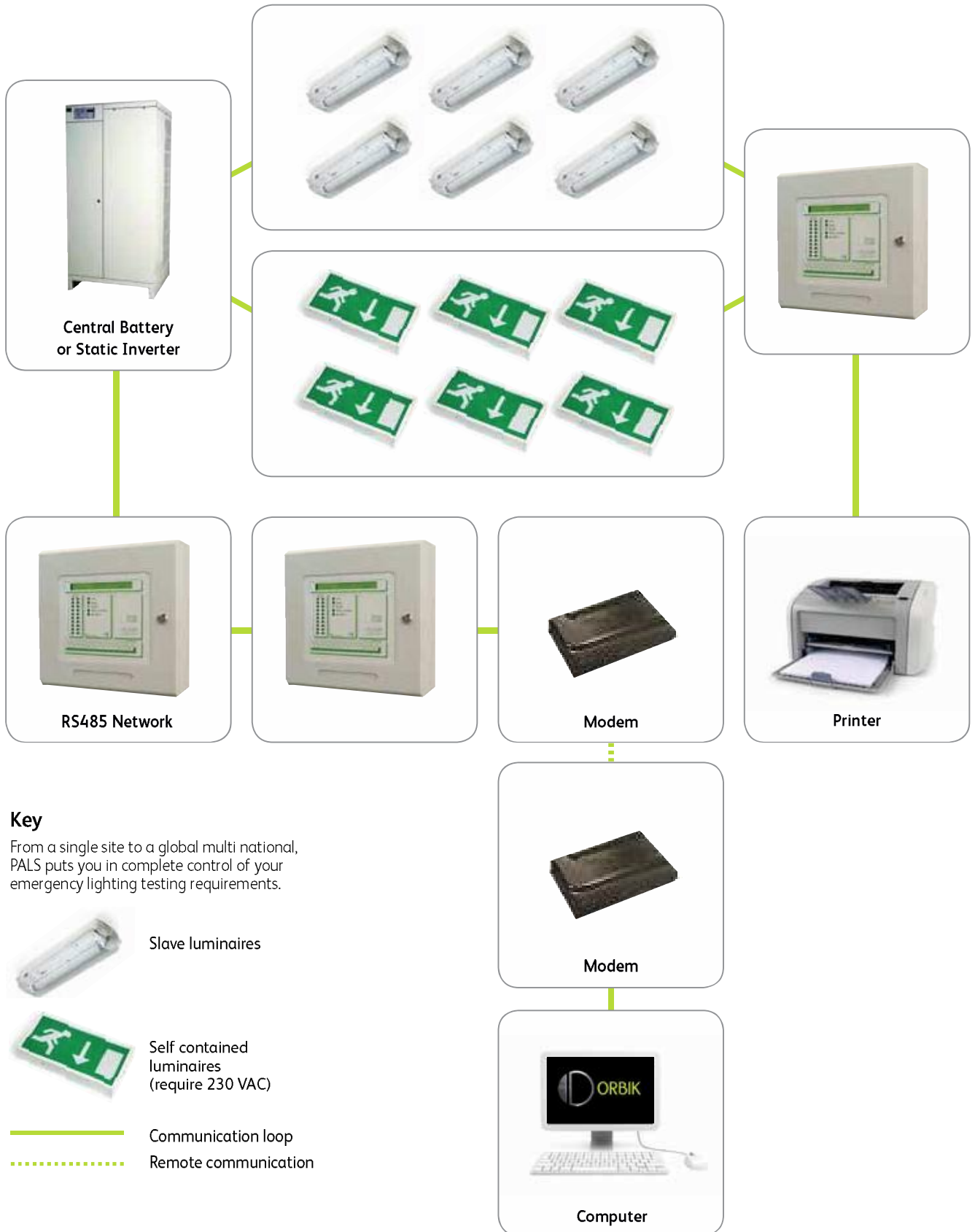
Specifications PALS™ Control Panel OEL-CA1

Dimensions:	Height 350 x width 340 x depth 115mm
Weight:	10 kg (ex. Batteries)
Mains Supply:	230V 50Hz AC – other voltages are available
Standby:	Integral charger for 12V, 6Ah Sealed lead acid battery (battery not included)
Warning output:	4 programmable short circuit protected monitored outputs 1 amp per output maximum, total current 2 amps
Auxiliary relay:	2 programmable volt free change over outputs Contacts rated at 5 amps 250V max. per relay
Sensor circuit:	2 wire addressable loop
Loop protection:	Short circuit protection on-board (i.e. without isolators in loop).
Signalling Lines:	1 expandable to 5 via plug-in line driver circuits
Devices per Line:	up to 126 luminaires per line driver
Controls:	Alpha-numeric key pad
Indicators:	20 Test zone LED's and audible buzzer
Display:	2 line by 40 characters backlit LCD 20 LED zone test indicators 20 LED zone fault indicators 10 LED system indicators 2 LED common fault indicators
Communications:	1 x RS485 serial port (OEL-485 plug in module required) 1 x on-board RS232 port (OEL-004 lead assembly required)

Recommended Cable: For signalling line circuits: Beldon 8762, 8760 or 8719 is recommended.

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System schematic/PALS



Key

From a single site to a global multi national, PALS puts you in complete control of your emergency lighting testing requirements.



Slave luminaires



Self contained luminaires (require 230 VAC)



Communication loop



Remote communication

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Self-contained interface units

(OEL-302) monitor and test for:

- Unswitched mains supply present at all times
- Battery connected and charging
- Light output from the lamp in emergency operation (PALS monitors the actual lamp light output as current monitoring can be unreliable)
- Data loop integrity at all times

Central battery system interface units (OEL-307) monitor and test for:

- Data loop integrity at all times
- Light output from the lamp in emergency operation



Dimensions: Depth 30 x width 50 x length 130 mm

Weight: 80 grams

Fixing Centres: 120mm

Cat No	Description	Function
OEL-CA1	PALS™ Control Panel	Each PALS™ panel requires at least one OEL-001 driver, with a maximum of 5
OEL-001	PALS™ Line Driver	To allow for future expansion, specify 100 devices per driver (Maximum 126)
OEL-003	9 Pin - 25 Pin D Type Cable	For serial printer connection
OEL-004	RS232 Cable and Gland	Internal cable and gland for local printer and RS232 panel communications
OEL-006	Modem Cabling Kit	Requires OEL-485 and OEL-009 (PC Net 002 software)
OEL-008	PC-Net 001 Upload Software	To allow easy on-site description and test changes via external computer
OEL-009	PC-Net 002 Light Logger Software	Allows full off-site system monitoring and testing facilities
OEL-010	RS232 Cable to Centronics	For parallel printer connection
OEL-108	RS232-RS485 Converter	Converter for use with local RS232 printers
OEL-301	240V AC Current Sensor Interface	Used to detect the current into mains luminaires
OEL-302	Lighting Interface	One required for each maintained/non-maintained luminaire, monitors charge, mains and light
OEL-304/20	12 Volt 20W Tungsten Interface	Monitors the current in 10W and 20W non-maintained Tungsten luminaires
OEL-304/40	12 Volt 50W Tungsten Interface	Monitors the current in 20W and 50W non-maintained Tungsten luminaires
OEL-305	Central System Interface	One addressable relay required for each static inverter or central battery unit
OEL-307	Light Sensor Interface	Monitors only the lamp light output, one required for each luminaire on central systems
OEL-485	RS485 Network Card	One required for each panel for local and modem networking of PALS™ panels
16-508	12 Volt 6Ah Sealed Lead Acid Battery	Must be installed in each PALS™ control panel
LED-INT	Interface for 4 V LED circuits from 1 to 5 W and 6V 10W tungsten lamps.	