

IM-6800

Imperia Smart Emergency Touchscreen Master Panel



General Description

IMPERIA Master Panel is designed and tested to comply with the DALI standards EN 62386 (V0 and V1), for DALI emergency lighting components.

IMPERIA operates without a need for permanent connection to a PC or network. The controller is designed to make use of intuitive controls, allowing simple control and change to its attached DALI networks. Reports may be viewed on the screen, displayed directly. Alternatively, the reports can be uploaded to the IMPERIA sever.

IMPERIA is designed to control and monitor Class 1 DALI EXIT & Emergency Fittings ONLY. It does not have support for any other class of DALI component. The firmware of IMPERIA is upgradeable via USB or IMPERIA server.

Cable Requirements

IMPERIA Master Panel is designed and tested to comply with the DALI Standard EN 62386 (V0 and V1), for DALI emergency lighting components. The DALI cable connecting the luminaries in a circuit must be mains rated. 2 core cable and can be 1.0mm sq to 2.5mm sq, based on the circuit length required. The DALI cables must be of full mains rated voltage, since under certain fault conditions the DALI bus can become live at the mains voltage.

Without the use of a DALI 'repeater & PSU', the circuit length is limited to 300m (using 1.5mm sq cable), and this length is doubled with use of a 'repeater & PSU'. Maximum lengths of cables permitted to be connected to the DALI network depends on the size of cable used. Refer the table given for maximum permitted length for various size of cables.

Testing Mode

The smart emergency master panel can be programmed to initiate self test at predetermined time and date, or repeat the testing at pre-determined time duration. Typically it can be programmed for weekly, monthly and quarterly testing.

For large network of light fittings, selected zones / floors can be grouped together, and testing can be conducted only in this area at a pre-determined time.

Main Features

- IMPERIA master panel monitors all fittings connected to it using the DALI protocol, and monitors the following parameters of each light fitting as well as the circuit integrity of the network.
- Each light fitting is given a unique address for identification.
- Control circuitry within each light fitting
- Discharge current of the battery
- Battery status and output terminal voltage
- Battery capacity to ensure compliance to the rated standby time
- Checks internal resistance of the battery to manufacturer's specification
- Lamp lux levels and failure monitoring
- Input supply for overvoltage and undervoltage is monitored
- Circuit integrity of the networking cables



Alpha Numeric Addressing

Each fitting can be addressed as below:

Name: There are 12 characters free for any Text Numeric or Special. Touch to bring up the Keypad for typing.

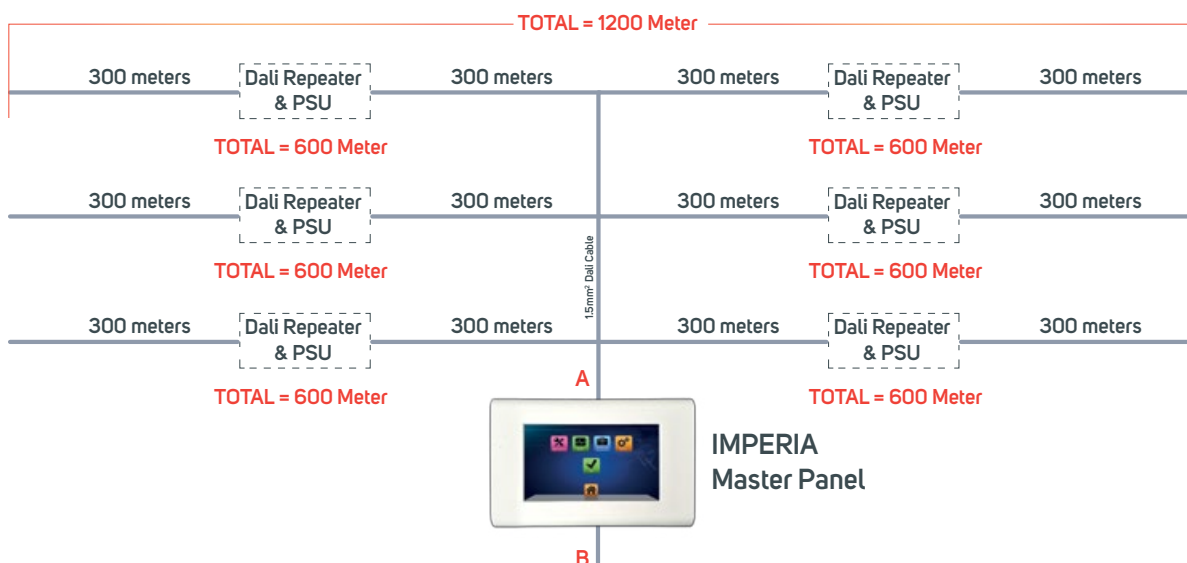
Location: There are 16 characters free for any Text Numeric or Special.



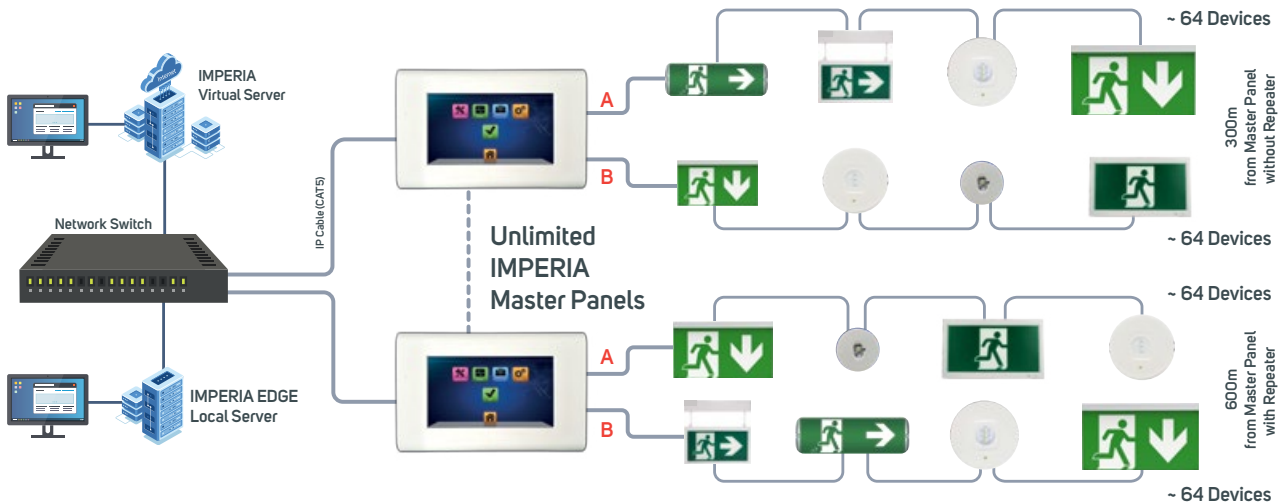
TECHNICAL SPECIFICATION

RATED VOLTAGE AND FREQUENCY:	230V @ 50/60Hz, 6.0W
TEMPERATURE RANGE:	0°C to +50°C
WEIGHT	873g without power supplies and controls
DIMENSIONS	W x H x D: 213mmx150mmx35mm (including Surface mount housing Cutout Size: 198mm x 117mm)
PROTECTION RATING:	IP20 - Suitable for indoor use only
MEMORY CAPACITY	4 years of report Storage

DALI NETWORK WIRING OPTIONS



IMPERIA - DALI WIRING & NETWORKING



NOTES ON DALI WIRING

1. The maximum number of light fittings per DALI circuit (line) not to exceed 64.
2. DALI wiring topologies can be bus, star (hub & spike), tree or line wiring.
3. Ring & Mesh wiring cannot be used when using DALI protocol.
4. Each IMPERIA control unit can accommodate 2 DALI circuits, so a max of 128 light fittings per IMPERIA control unit.
5. The DALI circuit length is dependent on the size of cable used, as shown below:
 - a) 1.0 mm sq cable will have a limit of 200m
 - b) 1.5 mm sq cable will have a limit of 300m
 - c) 2.5 mm sq cable will have a limit of 500m
6. Circuit length can be increased by using DALI repeater/ PSU (refer schematic drawings for clarification).
 - a) The repeater & power supply only increases the circuit length and not the number of fittings (addresses) per circuit (Line).
 - b) Use of a 'repeater/ PSU' unit doubles the DALI circuit length.
 - c) Only one repeater/ PSU can be used per leg of the circuit. However additional repeater/ PSU can be used in another leg of the same circuit. (Ref schematic).
7. The DALI cables must be mains rated, capable of carrying the full mains voltage, as under certain fault conditions the DALI bus can become live at mains voltage.
8. Use of the IMPERIA EDGE server eliminates the need to have an internet connection for connecting to multiple IMPERIA controllers. Passive LAN networking connects all the controllers to a central computer.

ORDER CODE

Part number	Alt. Part number	Description
IM-6800	SEMM2	Imperia Smart Emergency Touchscreen Master Panel