

## SENSALINK SENLPS G (96232305)

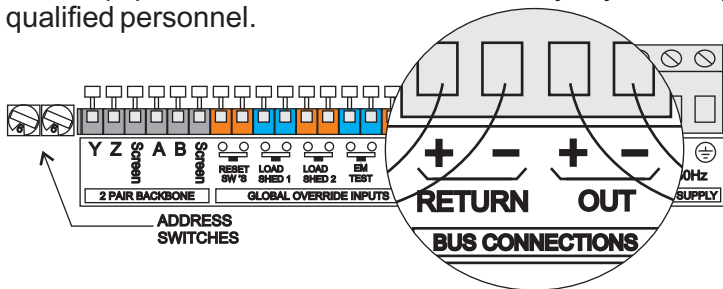
This latest generation SensaLink Bus Power Supply is for use only with Thorn's SensaLink Digital range of presence detectors and accessories. Up to 99 SENSALINK SENLPS G can be connected together (per installation) increasing capacity to almost 20,000 devices on a single SensaLink Digital system.

### Installation & Connection

The SENSALINK SENLPS G Bus Power Supply should be positioned in a readily accessible location, usually adjacent to the mains distribution board for the area being controlled. A fused 3A, 230 volt mains supply is required which should be dedicated to the SENSALINK SENLPS G for maximum reliability. This device **MUST** be earthed. It is recommended that Double-pole Isolation is provided.

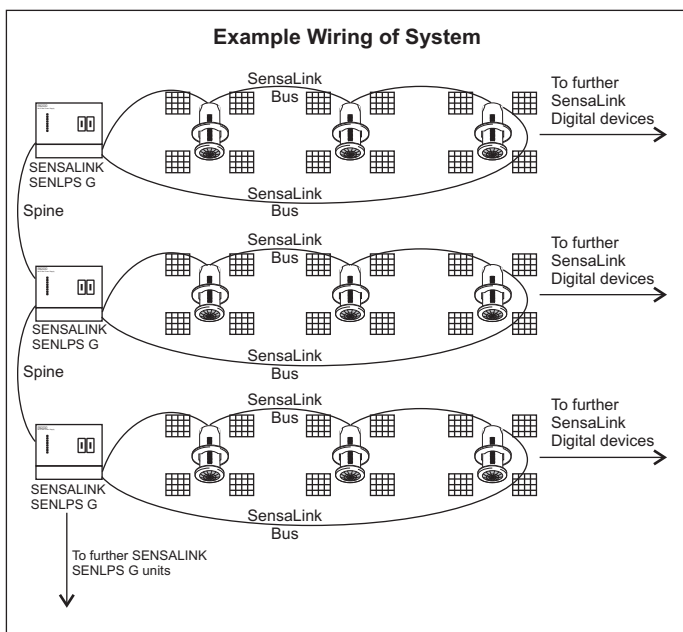
The SensaLink Digital bus network should be wired using 1.5mm<sup>2</sup> mains-rated, unshielded twisted pair, which starts from the bus power supply and connects into every SensaLink Digital device. Up to 200 devices can be connected to one SENSALINK SENLPS G. Do not connect mains to the SensaLink Bus.

This equipment should be installed only by suitably qualified personnel.



### Wiring Topology

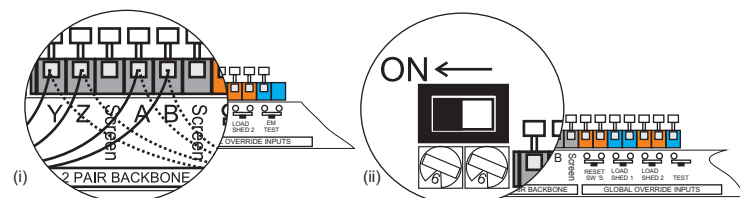
The SensaLink Digital Bus may be wired in a 'free topology' - i.e. any combination of spurs and rings. It is recommended however, that a ring topology is used so that the integrity can be checked. It should be wired from the 'OUT' terminals to every device on the system, coming back to the 'RETURN' terminals. The polarity of the SensaLink Digital Bus must always be maintained. The switch to the left of the bus terminal blocks, when pressed, performs an integrity check on the bus. A correctly installed system will cause the green LED below the switch to flicker.



### Connecting Multiple SENSALINK SENLPS G

On larger installations where multiple SENSALINK SENLPS G units are required, they may be connected together via a 'spine' or 'backbone'. The spine should be wired using 24AWG twisted pair, screened communications cable, e.g. Belden 9502. When SENSALINK SENLPS G are linked in this way Common Zone 1 becomes a 'Building Zone', providing building-wide Common Zone 1 linking. The maximum length of the spine should not exceed 1200m with all SENSALINK SENLPS G being linked in a single spur.

The spine should be linked to AB and YZ as shown (i). Note that the screen is not shown, however, it must be connected at each SLKGPSU.



Devices on the bus may be connected in any order. Spurs are permissible but are best avoided as they will not be checked during the integrity test. Accurate as-fitted records will assist in fault finding. The bus may be run with mains wiring providing twisted pair bus cable as detailed above is used throughout. Set the address switches of each SENSALINK SENLPS G on the system to any unique number from '00' to '99'. At least one unit must be set to address '00' to act as 'master'.

## Override Inputs

Three pairs of switch input terminals located behind the lower housing cover enable easy control of complete systems from one centralised location. Inputs require a latching, normally-open switch or a momentary, push-to-make switch as appropriate:-

**All On Full** - This command affects every device on the SensaLink Bus.

Use a latching normally-open switch. When the switch is made, all devices turn on at full brightness. The devices will go to their 'Entry Scene' no later than 30 seconds after the switch is released. Please note this function is also available via a keyswitch on the front panel.

**Load Shed 1** - This command is addressed to each device on the SensaLink Bus that has been programmed to 'GlobalAddress 1 Rx: YES'.

Use a latching normally-open switch. When the switch is made, all relevant devices turn off. The devices will begin responding the movement again (go to their 'Entry Scene' if the area is occupied) no later than 30 seconds after the switch is released.

**Load Shed 2** - This command is addressed to each device on the SensaLink Bus that has been programmed to 'GlobalAddress 2 Rx: YES'.

Use a latching normally-open switch. When the switch is made, all relevant devices turn off. The devices will begin responding the movement again (go to their 'Entry Scene' if the area is occupied) no later than 30 seconds after the switch is released.

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## Front Panel

The status of each switch at any given time is indicated through five green LEDs located on the front panel of the SENSALINK SENLPS G. They illuminate only when the switch associated with each command is closed. The LEDs go out instantly when the switch is opened although the actual command may still be active on the bus for up to 30 seconds.

The 'All On Full' command can be instigated via keyswitch next to the LED array.

The red Power LED will illuminate when mains power is applied to the unit.

The colourless Activity LED flashes green only when there is activity in any zone on the bus. It flashes red when a bus installation fault is detected regardless of movement or occupancy in the building. Please note that not all faults will be indicated by this LED.

The yellow Linking LED will flash when multiple SENSALINK SENLPS Gs are connected together and Common Zone 1 linking occurs.

## Technical Data

Operating voltage: 230V 50Hz

Power consumption: <10W

Maximum number of SENSALINK SENLPS G per installation: 99

Maximum number of devices per SENSALINK SENLPS G: 200 (SENSALINK WHI MW SENLCP and SENSALINK RS MW SENLCP count twice each)

Maximum total length of Bus cable (ring topology): 1500m

Dimensions (w x d x h): 213 x 185 x 117mm

IP rating: 65

## Cable Specifications

SensaLink Digital Bus cable: 1.5mm<sup>2</sup> mains rated unscreened twisted-pair.

Spine/Backbone cable: 2x2x0.2mm<sup>2</sup>, twisted pair, screened communicating cable, eg RS-232 computer cable, maximum length 1200mm.

Thorn Lighting Limited  
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# THORN

**SENSALINK SENLPS G (96232305)**  
**SensaLink Bus Power Supply Global**  
**(formerly known as SLKGPSU)**



**Installation and Commissioning**  
**Instructions**