

# DLS-DALI Lighting Control System

## Datasheet



The DALI64 lighting control system is a fully featured standalone DALI lighting control system embedded into a state of the art PIR. DALI64 can seamlessly integrate with Trend BEMS systems with a simple 2 wire Sylk/Wallbus connection or operate as a standalone DALI addressable system.

Designed to DALI 2 open protocol, it provides 64 DALI luminaire addresses and 64 Device addresses (e.g. PIR, switch input etc.)

Room level environment control of HVAC and lighting is achieved through integration of DALI64 lighting control with Trend BEMS. A single 2 wire Wallbus connection to the Trend IQ™ECO or IQ4 is all that is required to enable the room to be controlled automatically, enabling native lighting control within a Trend BEMS System. For details about installing and configuring the Trend system see the Trend documentation for IQECO controllers available from <https://partners.trendcontrols.com>.

DALI64 gives you the ability to visualise & make changes to the Lighting Control system through IQ™VISION, such as; time delay, light level, absence / presence mode & load shedding.

When integrated with BEMs DALI64 enables you to automate the control of the colour temperature of the luminaires to match natural circadian rhythms. This creates lighting that makes us feel more alert and productive.

The integral power supply within the DALI64PSU eliminates the need for an additional DALI power supply, reducing installation complexity and the associated costs and time.

An additional power supply can be added to the DALI Bus - up to a maximum of 250mA in total.

### Product Comparison

	Commission with Light Touch App	Flush Mount	Surface Mount	Addressable DALI Luminaires per system	Lens tilting	Wireless maintenance free switches	Sylk/Wallbus connection (to BEMS)	Occupancy Zones	Power to DALI bus	Switch Input (Mains)
DALI64F	•	•		64	•	•		16		
DALI64S	•		•	64	•	•		16		
DALI64SYLKF	•	•		64	•	•	•	16		
DALI64SYLKS	•		•	64	•	•	•	16		
DALI64PSUF	•	•		64	•	•		16	•	1
DALI64PSUS	•		•	64	•	•		16	•	1
DALI64SYLKPSUF	•	•		64	•	•	•	16	•	1
DALI64SYLKPSUS	•		•	64	•	•	•	16	•	1
DALINETF		•								
DALINETS			•							

## FEATURES & BENEFITS

- A maximum of 64 DALI luminaires can be connected via DALI Bus
- DALI switch input modules can be added to connect normal 'push-to-make' switches.
- DALI scene plates can be added to enable simple and effective scene selection.
- Wireless switches can also be used for installation convenience.
- 1 Mains switch input can be connected directly to PSU variants.
- DALI64SYLKPSU variants enable connection to BEMS system via Sylk/Wallbus.
- The DALI64PSU provides 150mA of power to the DALI network. An external power supply can be added if required up to a maximum total of 250mA.
- Commissioning is performed via Bluetooth using the Light Touch by Honeywell App (available for Android only).
- Partition and join features enable up to 3 rooms with 2 partitions in between them to be grouped so rooms can operate as one entity when one or both partitions are opened.

# DLS-DALI Lighting Control System Technical Specifications

## ELECTRICAL

### Power input

DALI64, DALI64SYLK: Powered from DALI bus  
 DALI64PSU: 220V to 240V 50/60 Hz  
 DALI64SYLKPSU: 220V to 240V 50/60 Hz  
 DALINET: Powered from DALI bus

### Power Consumption

DALI64: 12mA  
 DALI64PSU: 3W active, <0.5W static  
 DALI64SYLKPSU: 4W  
 DALINET: 4mA  
 DALI64SYLK: 15mA  
 DALI Scene Plates: 10mA  
 DLS4IM DALI: 4.1 mA typical

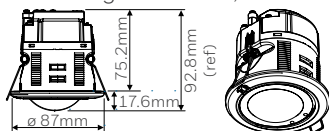
### Load Rating

DALI: 64 DALI Ballasts/Drivers

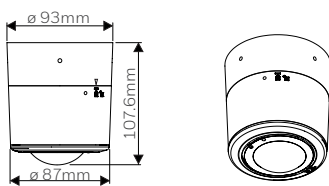
## MECHANICAL

### Dimensions

Flush Mount: Height 92.8mm, diameter 87mm



Surface Mount: Height 107.6mm, diameter 93mm



Fascia Colour: White (RAL9010)

Weight: Flush 121g Surface 215g

Material: Flame retardant PC/ABS

IP Rating: IP20

### Terminal Connections

DALI: Pluggable screwless  
 Sylk/Wallbus: Pluggable rising cage clamp  
 Power: Pluggable rising cage clamp  
 Switch input: Pluggable rising cage clamp

### Cable

DALI: 2 core cable  
 Sylk/Wallbus: Unscreened twisted pair  
 Power: Derive from appropriate wiring regulations  
 Switch input: 0.75mm<sup>2</sup>

### Terminal Capacity

DALI: 1 x 0.5-1.5 mm<sup>2</sup> solid or stranded  
 Sylk/Wallbus: 1 x 0.5-1.5 mm<sup>2</sup> solid or stranded  
 Power: 1 x 0.5-2.5 mm<sup>2</sup> solid or stranded  
 Switch input: 1 x 0.5-2.50 mm<sup>2</sup> solid or stranded

### Max Cable Length

DALI: up to 300m - If using 1.50mm<sup>2</sup> cable  
 Sylk/Wallbus: 60m  
 Power: Derive from appropriate wiring regulations  
 Manual Switch: 10m

## ENVIRONMENTAL

Operating Temperature: 0° C to 40° C\*

Storage Temperature: -20° C to 80° C

Humidity: 20% to 80% non-condensing

\*Note a difference of ±3°C is required between ambient temperature and temperature of the target to be detected.

## CONFORMITY

Conformity: EMC-2014/30/EU, LVD - 2014/35/EU, RoHS-2011/65/EU, RED2014/53/EU

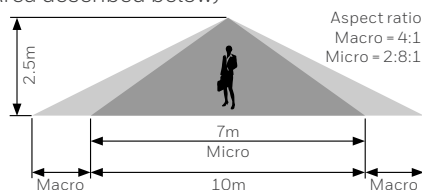
## SENSING

Technology: PIR

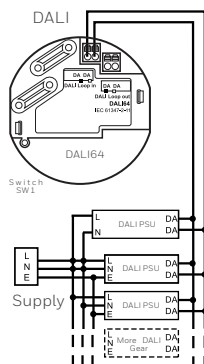
Max recommended mounting height: 3.5m

Points of detection: 155

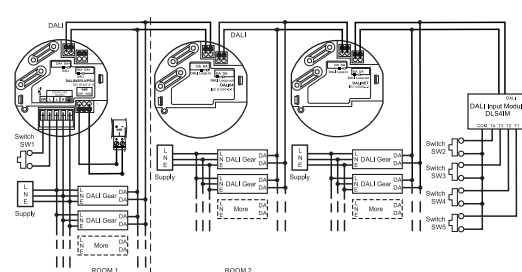
Coverage: 360° (Area described below)



## BASIC CONNECTIONS



## EXTENDED CONNECTIONS



## ORDER CODES

DALI64F	Bus powered, flush mount DALI Lighting Controller
DALI64S	Bus powered surface mount DALI Lighting Controller
DALI64SYLK	Bus powered, flush mount DALI Lighting Controller with Sylk/Wall Bus for direct BEMS connection.
DALI64SYLKPSU	Bus powered surface mount DALI Lighting Controller with Sylk/Wall Bus for direct BEMS connection.
DALI64PSUF	Mains powered flush mount DALI Lighting Controller with 150mA Integral Power Supply.
DALI64PSUS	Mains powered surface mount DALI Lighting Controller with 150mA Integral Power Supply.
DALI64SYLKPSUF	Mains powered flush mount DALI Lighting Controller with 150mA Integral Power Supply and Sylk/Wall Bus for direct BEMS connection.
DALI64SYLKPSUS	Mains powered surface mount DALI Lighting Controller with 150mA Integral Power Supply and Sylk/Wall Bus for direct BEMS connection.
DALINETF	Bus powered flush mount DALI Network Sensor.
DALINETS	Bus powered surface mount DALI Network Sensor.
SURFMT	Surface Mount Kit
LOCKRING	Secure Flush Mount Adaptor
28001987	DALI Touchplate - Multi - 3 scenes, dim up/ down, broadcast toggle - recall max/off - DALI BUS 1.0mA
28001989	DALI Touchplate - Select - 6 scenes, activate/deactivate - DALI BUS 1.0mA
DLS4IM	DALI Switch input module
LSHDQBL2210	10 metre DALI / QuickLink lead
LSHDQBL226	6 metre DALI / QuickLink lead
DLSDSLW765	DALI HD Dimming Lead 7 core, 5 metre
BESA6PSR	Connect BESA Box 6 Pole
00030366	Wireless switch 1 gang
00030666	Wireless switch 2 gang
TP3006	T Piece connector 6 pole
<b>Commissioning &amp; End User Tools</b>	
LIGHT TOUCH BY HONEYWELL	Commissioning App for DALI lighting