

MLS3xxxCDR

High Detection Microwave Sensors

Technical Data Sheet

The MLS3xxxCDR High Detection Microwave Sensors offer high performance presence detection using Microwave technology and contain a photocell to monitor total light levels, allowing the light output of dimmable luminaires to be adjusted to suit the natural light level available.

Designed specifically for connection to CDW12U5, CDW12X5, CDH4U5 and CDH8U5 Lighting Control Modules (LCMs). The sensors connect to the LCM via RJ45 patch leads. Ready-made patch leads are available in lengths of 3m, 5m and 10m.

The MLS3401CDR is available as a flush mount version, and offers 360-degree microwave presence detection. The MLS3500CDRF is also available as a flush mount version, and offers directional microwave presence detection. A SURFMT kit is available to convert the sensors to surface mount versions.

Both MLS3401CDR and MLS3500CDR contain an Infrared receiver that can be used both for local control (from a hand-held device), when in service, and for initial commissioning.

When correctly installed and connected the all variants are SELV devices.

They are not recommended for use where there are large areas of metal such as metal ceiling panels as unpredictable sensitivity may result. They are sensitive to movement and must be installed on a rigid surface that will not itself be subject to movement.

COMMISSIONING

The configuration information is set up and stored on the LCM not the individual detectors. Set up of the controlling or switching set-point for the photocell is performed using an infrared programming tool (QuickSet Pro).

FEATURES & BENEFITS

- 360° degree and directional microwave detection variants
  - Surface and flush mount options.
  - Designed to connect to CDW12U5, CDW12X5, CDH4U5 and CDH8U5 Lighting Control Modules
  - SELV compliant - subject to correct installation
  - Configuration stored on LCM
  - Local control from a hand-held IR device



Product Comparison

Part Number	Flush Mount	360 degree Sensing	Directional Sensing
MLS3401CDRF	•	•	
MLS3500CDRF	•		•

# MLS3xxxCDR High Detection Microwave Sensors Technical Data Sheet

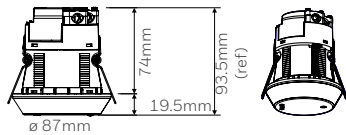
## ELECTRICAL

**Power input:** Powered from LCM  
**Power consumption :** 1W  
**Operating voltage:** 12V DC, SELV if installed correctly.

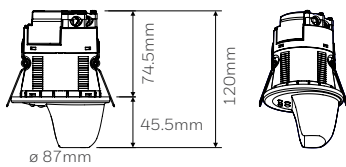
## MECHANICAL

### Dimensions

**MLS3401CDRF:** Height 93.5mm, diameter 87mm



**MLS3500CDRF:** Height 120mm, diameter 87mm



**Cut out diameter:** 73mm  
**Colour:** White (RAL9010)  
**Material:** Flame retardant PC/ABS  
**Weight**

**MLS3401CDRF:** 140g  
**MLS3500CDRF:** 240g

**IP Rating:** For indoor use only: IP40

### Terminal Connections

**LCM:** RJ45

### Cable

**LCM:** 4- twisted pair, 24 AWG multistranded, unscreened data cable to Category 5E standard, (e.g. Belden Datatwist 350).

Ready-made patch leads in lengths of 3m, 5m and 10m are available.

### Max Cable Length

**LCM:** 100m

## ENVIRONMENTAL

**Operating temperature:** 0°C to 45°C  
**Storage temperature:** -20° C to 80° C  
**Humidity:** 20% to 80% non-condensing

## CONFORMITY

**Conformity:** EMC-2014/30/EU, LVD – 2014/35/EU, RoHS-2011/65/EU, RED2014/53EU, Human exposure standard EN 62479:2010.

## SENSING

### Technology

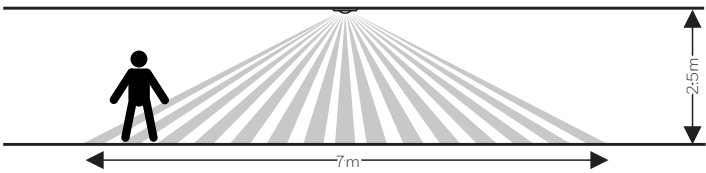
**Presence detection:** Microwave  
**Light level detection:** Photocell

### Max recommended mounting height:

**MLS3401CDR:** 3m  
**MLS3500CDR:** 3.5m

### Coverage:

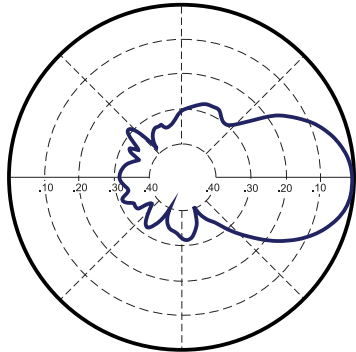
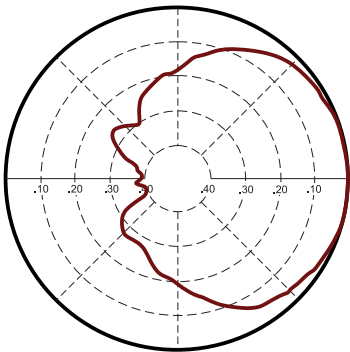
**MLS3401CDR:** 360° Cone-shaped detection pattern, diameter (at floor level) = 2.8 x mounting height



**MLS3500CDR:** Adjustable up to 20m

**Horizontal**

**Vertical**



## ORDER CODES

<b>MLS3401CDRF</b>	MLS Connect Digital flush mounting 360 degree microwave sensor with photocell
<b>MLS3500CDRF</b>	MLS Connect Digital flush mounting directional microwave sensor with photocell
<b>BT5E050GY</b>	5m Detector Patch Lead
<b>BT5E0100GY</b>	10m Detector Patch Lead
<b>SURFMT</b>	Kit to convert the sensors to surface mount versions.
<b>Commissioning &amp; End User Tools</b>	
<b>QUICKSET PRO</b>	QuickSet Pro Digital 2-Way Programming Tool
<b>HC5A</b>	Universal Hand-held Controller c/w wall bracket