# **TRANS**

# Occupancy & Daylight Sensor Solutions



Flexibility • Versatility • Simplicity





### **Table of Contents**

### **FOREWORD**

Many unoccupied spaces with continued lighting operations result in a substantial waste of energy for non-residential buildings. Numerous case studies and reports have concluded substantial energy savings through broad application of occupancy and daylight sensing controls. As a dedicated manufacturer of sensor and control solutions for sustainable buildings, IR-TEC strive to develop more sensors that not only provide excellent occupancy and daylight sensing performances, but also offer versatile controls to help achieve maximum energy savings.

Maximizing energy savings through broad application of occupancy and daylight sensing controls



# **About TRANS Sensor Family**

Introducing the TRANS from IR-TEC, a standalone control sensor family developed from an industry leading design innovation that delivers interchangeable Electrical, Mechanical, and Optical options to its members.

This innovative modular concept has helped creating the TRANS family with numerous types of occupancy and daylight sensors featuring distinctive functionality and electrical characteristics to achieve the highest level of energy saving performance.

The TRANS sensor family ranges

- from occupancy to daylight sensors
- from line voltage to low voltage power
- from single PIR/HFD to dual technology
- from for indoor use to IP-66 wet location
- from for high-bay to wide angle detection
- from for load switching to BMS signaling
- norm for load switching to bivio signaling
- from manual setting to remote programming
- from 24-hour sensing to ambient light inhibitedfrom for fixture integration to building installation
- from for standalone control to system integration
- from for on-off switching to DALI/0-10V dimming
- from multi-level StepDIM to continuous SmartDIM

## Interchangeable EMO

Not all applications have the same conditions and control requirements, thus different types of sensor may be required for mounting at different heights in different ways. The innovative "Interchangeable EMO" design concept helps create the TRANS sensor family with unparalleled flexibility.



- **E** Electrical
- M Mechanical
- O Optical

Numerous types of sensor featuring distinctive power supply, switching/dimming control, and signaling output are available in the same appearance. Most TRANS sensors can be flexibly integrated with OEM luminaires or mounted on the ceilings with different mounting brackets. Multiple lens options can be selected for PIR based TRANS sensors to provide different detection coverage at different mounting heights.

## Simple and User Friendly Configurations







Most sensors require certain settings, such as control scheme, delay time, ambient lux threshold, dim level...etc. to achieve optimal control performance. TRANS sensors employ DIP switches, Accu-Set potentiometers, or 2-way IR remote programmer to make sensor setting an easy, intuitive, and always accurate job.



## **Diverse Mounting Options**

Not only does the structural diversity of today's building spaces require ceiling sensors to be mounted in many different options, the diversity of luminaires in the market today can also make sensor integration a challenge.

To spread the use of sensors, TRANS offers diverse mounting options for all types of applications. The TRANS sensor can be directly integrated or externally attached with OEM luminaires for indoor or outdoor, flexibly installed on the ceiling with junction box, surface or recess mounting bracket.







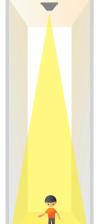


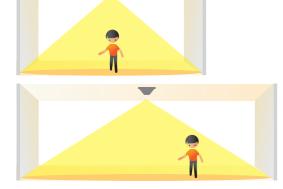
## Changeable Lens Options

Every PIR based sensor requires an optical lens to "see" the occupant within its range, which also determines the detection pattern by lens design. Lenses with different segment formats will provide different detection pattern and ranges.

Different building spaces require different lenses to provide optimal detection ranges. Every PIR based TRANS occupancy sensor is designed with an innovative twist-lock mechanism which allows an installed sensor to provide different detection coverage by simply changing a lens.



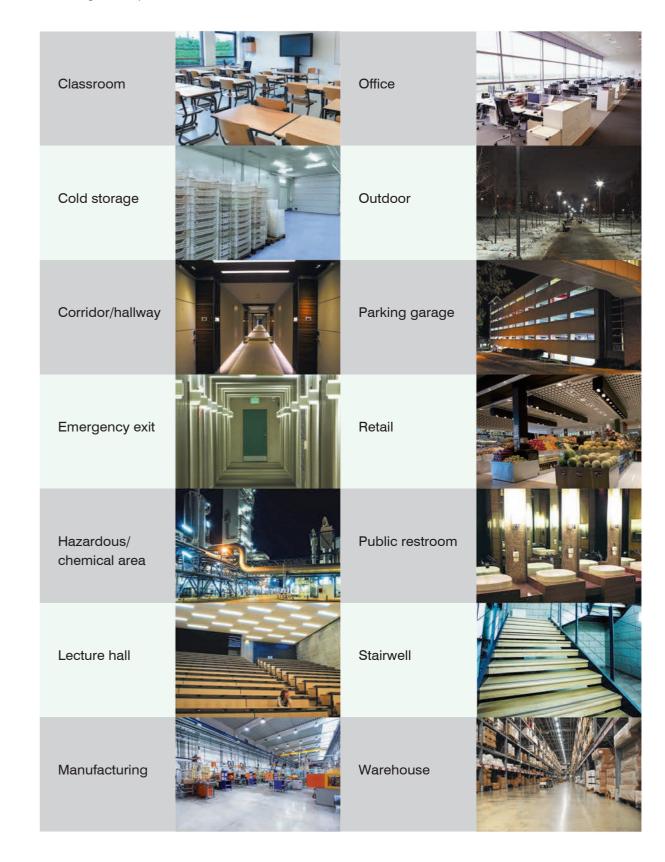






## Maximize Savings through Broad Applications

To meet the fast changing mandatory requirements of energy savings, TRANS sensor family offers a wide range of line voltage and low voltage sensors for broad applications. These sensors are packed with innovative features, superior performance, and versatile controls for direct load switching or control signal output.



## TRANS Occupancy Sensors

Occupancy sensors ensure maximum energy savings through automatically turning off or dimming the lights to a lower level where and when they are not needed. IR-TEC's TRANS family offers a broad range of occupancy sensors utilizing different sensing technologies for your selection.

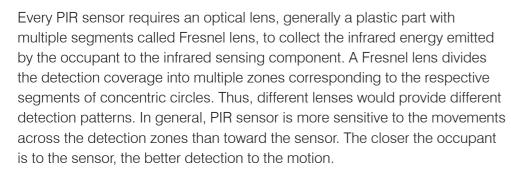






#### **TRANS-PIR Occupancy Sensor**

Passive Infrared (PIR) is the most popular and widely applied occupancy sensing technology in the market. The sensor senses the presence and motions of occupant by detecting the change of infrared energy emitted from a warm object (ex. human body or vehicle) in motion and the background.



TRANS-PIR occupancy sensors are available with multiple mounting and/or lens options for selection. See page 12-13 for the available mounting and lens options of a specific sensor.







LRD-309S



LRD-309SP

### **Mounting Options**





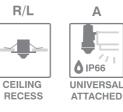














Lens Options В C D







2X STANDARD

4X EXTRA WIDE







#### **TRANS-HFD Occupancy Sensor**

High Frequency Doppler (HFD) sensing technology is different from Passive Infrared, it senses the presence and motions of occupant by detecting the frequency shift bouncing back from a moving object. HFD sensor provides better minor motion detection without requiring an unobstructed line-of-sight placement like PIR. TRANS-HFD occupancy sensor employs an advanced HFD radar module operating with very high frequency radio waves, thus making it suitable for applications like office with partitions, library with cubicles or restroom with stalls.



All TRANS-HFD occupancy sensors are available with multiple mounting options as below.

#### Mounting Options M



INTEGRATED

















### **TRANS-DUO Occupancy Sensor**

As no any single occupancy sensing technology is perfect, thus we created TRANS-DUO occupancy sensor to provide better reliability and performance by combining PIR and HFD sensing technologies into a low profile sensor housing. By utilizing the advantages of each single sensing technology with advanced processing logic from TRANS-PIR and TRANS-HFD sensors, TRANS-DUO occupancy sensor is ideal for most applications, as it not only provides superior sensing performance, but also greatly reduces the possibility of false activating caused by environmental interferences.



The TRANS-DUO occupancy sensor can be supplied with specific lens to provide different PIR detection coverage.

### Lens Options



















## **Lighting Control Strategies**

IR-TEC's TRANS occupancy sensors are designed with different lighting control strategies to fulfill different requirements of applications. In addition to the typical ON/OFF switching, many TRANS sensors also offer Bi-Level StepDIM and/or sophisticated continuous SmartDIM control.

#### **On/Off Switching**

On/Off switching has been a typical lighting control strategy commonly used in most applications. Most energy codes require automatic shutoff control to save energy from unused lighting in many spaces, most TRANS occupancy and daylight sensors are designed, or can be set to switch on the electrical lights as needed, and automatically switch off when electrical lights are unneeded.







Occupancy presence Light auto on



Occupant leave - Delay time start Light remains on



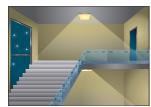
Delay time end Light auto off

### **Bi-Level StepDIM Control**

Bi-level StepDIM control is an ideal control strategy with proven performance in energy savings, while still maintaining certain level of lighting for public safety and comfort. This control strategy requires using an occupancy sensor designed with bi-level control functionality that will keep dimmable lighting at a low-dim level during vacancy period or nighttime, instead of complete shutoff.



Light is off @day



LOW DIM @night



Occupant presence HIGH DIM or 100% on



Occupant leave Delay time start



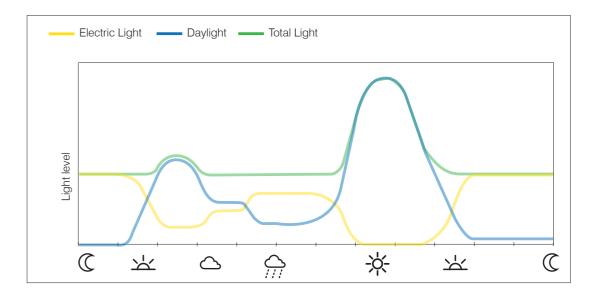
Delay time end LOW DIM @night



Light off @day

#### **Continuous SmartDIM Dimming**

**SmartDIM** is a sophisticated dimming control technology developed by IR-TEC to enable the sensor to maintain the ambient light level within a pre-set range by continuously adjusting the lighting output, based on the amount of daylight available in the space. IR-TEC's SmartDIM control not only provides a smooth dimming performance to ensure occupant satisfaction while achieving maximum energy savings, but also helps extend the operational life of luminaire through dynamically adjusting the lighting output at optimal level.





### TRANS Occupancy Sensor Selection Reference - Remote Setting

Model No.	Tech	Control	Power	Output	Dimming	Application	Appearance
MRD-124S	PIR ALS	DALI	DALI bus	DALI	StepDIM SmartDIM	Luminaire integrated	
MRD-210S	PIR ALS	DALI	230VAC/ DALI bus	DALI	StepDIM SmartDIM	Luminaire integrated	
MRD-200SP	PIR ALS	DALI	230VAC/ DALI bus	DALI	StepDIM SmartDIM	Batten mount External via M20, IP65	
MRD-510S	PIR ALS	DALI	230VAC/ DALI bus	DALI	StepDIM SmartDIM	Luminaire integrated Ceiling mounted	See page 12 for sensor appearances with different mounting options
MRD-600SA	PIR ALS	DALI	230VAC/ DALI bus	DALI	StepDIM SmartDIM	Luminaire integrated Universal attached IP66	
LRS-509S	PIR ALS	On-Off	120/230/277 VAC	SLV	N/A	Luminaire integrated Ceiling mounted	See page 12 for sensor appearances with different mounting options
LRD-309S	PIR ALS	On-Off & Dim	120/230/277 VAC	SLV 0-10V	StepDIM SmartDIM	Luminaire integrated	
LRD-309SP	PIR ALS	On-Off & Dim	120/230/277 VAC	SLV 0-10V	StepDIM SmartDIM	Batten mount External via M20, IP66	
LRD-509S	PIR ALS	On-Off & Dim	120/230/277 VAC	SLV 0-10V	StepDIM SmartDIM	Luminaire integrated Ceiling mounted	See page 12 for sensor appearances with different mounting options
LRD-609SA	PIR ALS	On-Off & Dim	120/230/277 VAC	SLV 0-10V	StepDIM SmartDIM	Luminaire integrated Universal attached IP66	
HRD-600SP	PIR ALS	On-Off & Dim	347/480 VAC	SLV 0-10V	StepDIM SmartDIM	Luminaire integrated External via M20, IP66	
CRS-516S	PIR ALS	On-Off & Dim	12-48 VDC	RDP	StepDIM SmartDIM	Luminaire integrated Ceiling mounted	See page 12 for sensor appearances with different mounting options
BRD-510S	PIR ALS	On-Off & Dim	12-24 VDC	IDC 0-10V	StepDIM SmartDIM	Luminaire integrated Ceiling mounted	See page 12 for sensor appearances with different mounting options
MRB-510S	PIR ALS	BMS	12-24 VDC	Modbus	N/A	Luminaire integrated Ceiling mounted	See page 12 for sensor appearances with different mounting options

#### **TRANS Occupancy Sensor Selection Reference - Manual Setting**

Model No.	Tech	Control	Power	Output	Dimming	Application	Appearance
MOD-510S	PIR ALS	DALI	230VAC/ DALI bus	DALI	StepDIM	Luminaire integrated Ceiling mounted	F
LOS-509S	PIR ALS	On-Off	120/230/277 VAC	SLV	N/A	Luminaire integrated Ceiling mounted	w 🌎
LOD-509S	PIR ALS	On-Off & Dim	120/230/277 VAC	SLV 0-10V	SmartDIM	Luminaire integrated Ceiling mounted	E
LOD-500S	PIR ALS	On-Off & Dim	120/230/277 VAC	SLV 0-10V	StepDIM	Luminaire integrated Ceiling mounted	(43)
COS-516S	PIR ALS	On-Off & Dim	12-48 VDC	RDP	StepDIM	Luminaire integrated Ceiling mounted	P
BOA-516S	PIR ALS	On-Off & Dim	12-24 VDC	0-10V	StepDIM	Luminaire integrated Ceiling mounted	s
BOA-517S	PIR ALS	On-Off & Dim	12-24 VDC	DO 0-10V	StepDIM	Luminaire integrated Ceiling mounted	C
BOS-515S	PIR ALS	On-Off	12-24 VAC/DC	IDC	N/A	Luminaire integrated Ceiling mounted	
BOS-515N	PIR	On-Off	12-24 VAC/DC	IDC	N/A	Luminaire integrated Ceiling mounted	L
BOM-515S	PIR ALS	BMS	12-24 VDC	DO x 2	N/A	Luminaire integrated Ceiling mounted	R
LMS-509S	HFD ALS	On-Off	120/230/277 VAC	SLV	N/A	Luminaire integrated Ceiling mounted	See page 12 for sensor appearances with different mounting options
LMD-509S	HFD ALS	On-Off & Dim	120/230/277 VAC	SLV 0-10V	StepDIM	Luminaire integrated Ceiling mounted	See page 12 for sensor appearances with different mounting options
BDS-610SS	PIR HFD ALS	On-Off	12-24 VDC	IDC 0-10V	N/A	For occupancy sensing based lighting/BMS control	

**Legends** PIR: Passive infrared

**SLV:** Switched line voltage

RDP: Regulated DC power

HFD: High frequency doppler IDC: Isolated dry contact

Multiple mounting options

ALS: Ambient light sensor DO: Digital output

: Multiple lens options

### Mounting Options M

All TRANS PIR and HFD sensors can be integrated with luminaire or ceiling mounted in different options with specific mounting bracket. Same mounting bracket can be used with different sensor series, disregard the sensing technology, power, control output, wiring connection and functionality.

Mounting option	Code	Bracket #	TRANS-PIR	TRANS-HFD	Application Description
Fixture Integrated	F		- 4-2		This is the original form factor of TRANS sensor for integrating with OEM luminaire through a 51mm (2") hole or mounting on ceiling with different brackets.
IP-66 Fixture Integrated	w				This is the original form factor of TRANS Sensor for IP-66 fixture integration through a 51mm (2") hole or with a PMB-500.
Fixture External	E	EMB-500		6	The EMB-500 is a bracket for mounting the F-mount TRANS Sensor with indoor luminaire through a 1/2" hole.
IP-66 Fixture External	P	PMB-500		6	The PMB-500 is a bracket for mounting the W-mount TRANS Sensor with IP-66 luminaire through a 1/2" hole.
Ceiling Surface	S	SMB-500			The SMB-500 is a bracket for mounting the F-mount TRANS Sensor on the surface of luminaire and hard lid ceiling with or without junction box.
Junction Box	С	CMB-500			The CMB-500 is a bracket for mounting the F-mount TRANS Sensor with an octagonal or square junction box on the ceiling.
Ceiling Recess	L	LMB-500			The LMB-500 is a bracket for recess mounting the F-mount line voltage sensor through a 70mm hole with a tool removable back cover for cable connection.
Ceiling Recess	R	RMB-500			The RMB-500 is a bracket for recess mounting the low voltage TRANS sensors through a 70mm hole.
Fixture Internal	ı	IMB-500			The IMB-500 is a bracket for mounting the TRANS HFD sensor within a luminaire or behind a diffuser.

**Accessories** (for E/P mount sensors)

30 mm extension joint

EJ-30F

**EJ-50F** 50 mm extension joint



**EL-40F** 40 mm elbow joint



### Lens Options

Following lens options are available for TRANS PIR and DUO sensors to provide different detection coverage at various mounting heights.

Code	Lens	Coverage & Mounting Height	Feature and Application Notes
А	Cone	2.4~4.5 m (8~15 ft) <b>2X</b>	Lens A is a standard lens with 2X height coverage. It can be used to cover small to medium areas with major and walking motions.
В	Cone	2.4~3.0 m (8~10 ft) <b>6X</b>	Lens B is an extra wide angel lens with 6X height coverage. It has pretty good detection to the major motions across the zones.
С	Cone	4.5~9.0 m (15~30 ft)	Lens C is a high bay lens with 3X height coverage. This lens is typically used in warehouses or areas with ceiling higher than 6 m (20 ft).
D	Round flat	2.4~6.0 m (8~20 ft)	Lens D is a flat round lens with 2X height coverage. It has very good detection to the minor motion within its range.
F	Dome	2.4~6.0 m (8~20 ft)	Lens F is a wide angle lens with 4X height coverage ideal for universal application. It has good picking up for major and minor motions.
G	Arch	2.4~12.0 m (8~40 ft) <b>3X</b>	Lens G is a universal aisle way lens with 3X height coverage ideal for corridor/aisle way. This lens can be rotated to change the direction of coverage.
н	Dome	9.0~15.0 m (30~50 ft)	Lens H is a high bay lens with 1X height coverage. This diamond shape lens is specially designed for high bay application.
L	Arch	2.4~3.0 m (8~10 ft) <b>6X</b>	Lens L is a long aisle way lens with 6X height coverage ideal for corridor/aisle way. This lens can be rotated to change the direction of coverage.

#### NOTES

- 1. Coverage data is based on walking across the detection zones at 25°C. Higher temperature or walking toward the sensor will result in smaller coverage.
- 2. Mounting heights are recommended for obtaining optimal detection. Using at higher or lower is possible.
- 3. Lens C/G/H may be used up to 12/15/18 m at the areas with motions of large objects, such as forklift or trucks. To use the sensor higher than the recommended maximum height, please first ensure that the sensor with specific lens can pick up the motion at desired mounting height.

## TRANS Daylight Sensors







Daylight sensing control is a common lighting control strategy. It typically refers to the use of a daylight sensor to inhibit or dim the electric lights in a daylight area by sensing the available natural light. The principle is simple, an ambient light sensor (ALS) measures either the level of daylight contribution or the overall combined natural and electric light as the key component of switching or dimming the controlled lights in one or multiple zones to achieve an optimal lighting level based on the pre-determined parameters.



**TRANS-LUX** 

### Mounting Options M



**FIXTURE** 

INTEGRATED







**EXTERNAL** 



**EXTERNAL** 









**TRANS Daylight Sensor Selection Reference** 

Model No.	Control	Setting	Power	Output	Dimming	Application
LPS-509S	On-Off	Manual	120/230277 VAC	SLV	N/A	7-level LUX and TIME selection Standalone on/off control
BED-500S	On-Off & Dim	Remote	12-24 VDC	IDC 0-10V	StepDIM SmartDIM	SmartDIM control for continuous dimming, with wire leads
BED-510S	On-Off & Dim	Remote	12-24 VDC	IDC 0-10V	StepDIM SmartDIM	SmartDIM control for continuous dimming, with terminal block
BPD-500S	On-Off	Manual	12-24 VDC	IDC 0-10V	N/A	Provide IDC for on/off control and AO for BMS control, with wire leads
BPD-510S	On-Off	Manual	12-24 VDC	IDC 0-10V	N/A	Provide IDC for on/off control and AO for BMS control, with terminal block
BPD-502S	On-Off & Dim	Manual	12-24 VDC	IDC 0-10V	SmartDIM	Provide IDC for on/off switching and AO for SmartDIM control, with wire leads
BPD-512S	On-Off & Dim	Manual	12-24 VDC	IDC 0-10V	SmartDIM	Provide IDC for on/off switching and AO for SmartDIM control, with terminal block

**Legends** SLV: Switched line voltage

IDC: Isolated dry contact

Multiple mounting options

## **Control Strategies**

#### On/Off Switching

On/Off switching is a typical daylighting control strategy used in many commercial spaces. The sensor will turn on and off the electric lights based on the amount of daylight available in the space. This type of control may require setting an adjustable delay time before shutting off the electric lights to prevent frequent on-off switching behavior. However, the space may be over lit just before there is enough daylight to provide the minimum required light level.

#### **SmartDIM Continuous Dimming**

Continuous Dimming, some may refer as Constant Lighting, is an advanced control strategy for the lighting in the daylight zones. This strategy typically refers to the use of a daylight sensor with SmartDIM capabilities that will continuously adjust the output of electric lights to maintain the combined light level within a desired range, based on the amount of daylight available in the space. This control can only be achieved by using the sensor designed with continuous dimming capability, and the lighting under controlled MUST be "dimmable" as specified. A smooth continuous dimming control is the key to ensure occupant satisfaction while achieving energy savings as expected.

#### Mounting Options M



All TRANS daylight sensors can be mounted in various options with specific mounting bracket

, 0	THAINS daylight sensors can be mounted in various options with specific mounting bracket.								
Mounting option	Code	Bracket #	Appearance	Application Description					
Fixture Integrated	F			This is the original form factor of TRANS sensor for integrating with OEM luminaire through a 51mm (2") hole or mounting on ceiling with different brackets.					
IP-66 Fixture Integrated	W			This is the original form factor of TRANS Sensor for IP-66 fixture integration through a 51mm (2") hole or with a PMB-500.					
Fixture External	E	EMB-500		The EMB-500 is a bracket for mounting the F-mount TRANS Sensor with indoor luminaire through a 1/2" hole.					
IP-66 Fixture External	Р	PMB-500		The PMB-500 is a bracket for mounting the W-mount TRANS Sensor with IP-66 luminaire through a 1/2" hole.					
Ceiling Surface	iling Surface S S			The SMB-500 is a bracket for mounting the F-mount TRANS Sensor on the surface of luminaire and hard lid ceiling with or without junction box.					
Junction Box	Sox C			The CMB-500 is a bracket for mounting the F-mount TRANS Sensor with an octagonal or square junction box on the ceiling.					
Ceiling Recess L		LMB-500		The LMB-500 is a bracket for recess mounting the F-mount line voltage sensor through a 70mm hole with a tool removable back cover for cable connection.					
Ceiling Recess	R	RMB-500		The RMB-500 is a bracket for recess mounting the low voltage TRANS Sensor through a 70mm hole.					

## **Appendix**

#### TRANS OCCUPANCY SENSORS

Model No.		Tech	Control	Power	Output	Dimming
MRD-124S		PIR+ALS	DALI	DALI bus	DALI	SmartDIM/StepDIM
MRD-210S		PIR+ALS	DALI	230VAC/DALI bus	DALI	SmartDIM/StepDIM
MRD-200SP		PIR+ALS	DALI	230VAC/DALI bus	DALI	SmartDIM/StepDIM
MRD-510S	ML	PIR+ALS	DALI	230VAC/DALI bus	DALI	SmartDIM/StepDIM
MRD-600SA	L	PIR+ALS	DALI	230VAC/DALI bus	DALI	SmartDIM/StepDIM
LRS-509S	M	PIR+ALS	On-Off	120/230/277VAC	SLV	N/A
LRD-309S	L	PIR+ALS	On-Off & Dim	120/230/277VAC	SLV+0-10V	SmartDIM/StepDIM
LRD-309SP	L	PIR+ALS	On-Off & Dim	120/230/277VAC	SLV+0-10V	SmartDIM/StepDIM
LRD-509S	M	PIR+ALS	On-Off & Dim	120/230/277VAC	SLV+0-10V	SmartDIM/StepDIM
LRD-609SA	L	PIR+ALS	On-Off & Dim	120/230/277VAC	SLV+0-10V	SmartDIM/StepDIM
HRD-600SP	L	PIR+ALS	On-Off & Dim	347/480VAC	SLV+0-10V	SmartDIM/StepDIM
CRS-516S	ML	PIR+ALS	On-Off & Dim	12-48VDC	RDP	SmartDIM/StepDIM
BRD-510S	ML	PIR+ALS	On-Off & Dim	12-24VDC	IDC+0-10V	SmartDIM/StepDIM
MRB-510S	ML	PIR+ALS	BMS	12-24VDC	Modbus	N/A
MOD-510S	ML	PIR+ALS	DALI	12-24VDC	DALI	StepDIM
LOS-509S	ML	PIR+ALS	On-Off	120/230/277VAC	SLV	N/A
LOD-509S	ML	PIR+ALS	On-Off & Dim	120/230/277VAC	SLV+0-10V	SmartDIM
LOD-500S	ML	PIR+ALS	On-Off & Dim	120/230/277VAC	SLV+0-10V	StepDIM
COS-516S	ML	PIR+ALS	On-Off & Dim	12-48VDC	RDP	StepDIM
BOA-516S	M	PIR+ALS	On-Off & Dim	12-24VDC	0-10V	StepDIM
BOA-517S	ML	PIR+ALS	On-Off & Dim	12-24VDC	DO+0-10V	StepDIM
BOS-515S	M	PIR+ALS	On-Off	12-24VAC/DC	IDC	N/A
BOS-515N	ML	PIR	On-Off	12-24VAC/DC	IDC	N/A
BOM-515S	ML	PIR+ALS	BMS	12-24VDC	DO x 2	N/A
LMS-509S	M	HFD+ALS	On-Off	120/230/277VAC	SLV	N/A
LMD-509S	M	HFD+ALS	On-Off & Dim	120/230/277VAC	SLV+0-10V	StepDIM
BDS-600SS	L	PIR+HFD+ALS	On-Off	12-24VDC	IDC	N/A

#### TRANS DAYLIGHT SENSORS

Model No.	Tech	Control	Power	Output	Dimming
LPS-509S	ALS	On-Off	120/230/277VAC	SLV	N/A
BED-500S	ALS	On-Off & Dim	12-24VDC	IDC+0-10V	SmartDIM/StepDIM
BED-510S	ALS	On-Off & Dim	12-24VDC	IDC+0-10V	SmartDIM/StepDIM
BPD-500S	ALS	On-Off	12-24VDC	IDC+0-10V	N/A
BPD-510S	ALS	On-Off	12-24VDC	IDC+0-10V	N/A
BPD-502S	ALS	On-Off & Dim	12-24VDC	IDC+0-10V	SmartDIM
BPD-512S	ALS	On-Off & Dim	12-24VDC	IDC+0-10V	SmartDIM

#### Legends

PIR: Passive infrared **SLV:** Switched line voltage RDP: Regulated DC power **HFD:** High frequency doppler IDC: Isolated dry contact Multiple mounting options

ALS: Ambient light sensor DO: Digital output : Multiple lens options

#### - Mounting Options













Fixture Integrated

E Fixture External IP-66 Fixture IP-66 Fixture Ρ External Integrated

S Ceiling Surface C Junction Box

R Ceiling Recess L Ceiling Recess

#### - Lens Options











A 2X Standard

3X High Bay

**D** 2X Standard 6X Extra Wide

**F** 4X Wide Angle

**G** 3X Aisle Way

H 1X High Bay

L 6X Long Aisle

Code	Α	В	С	D	F	G	Н	L
M. Height (X)	2.4~4.5 m	2.4~3.0 m	4.5~9.0 m	2.4~6.0 m	2.4~6.0 m	2.4~12.0 m	6.0~15.0 m	2.4~3.0 m
Coverage	2X	6X	3X	2X	4X	3X	1X	6X

### **About IR-TEC**



### Premier Sensor and Control Solutions Specialist

Established in 1982, as a pioneer of infrared motion sensing technology in Taiwan, IR-TEC has committed itself to build a company stands for Innovation, Reliability, Technology, Efficiency, and Cooperation. With decades of continuous research and development, IR-TEC has successfully become a reputed specialist of sensor and control solutions for smart lighting and HVAC controls of commercial and industrial buildings.

All IR-TEC products are designed, manufactured, and verified by a professional team under a well-maintained ISO-9001 quality management system and a state-of-the-art ISO-14001 certified manufacturing facility. We cordially invite you to experience supreme product quality and excellent business service offered by IR-TEC, a business partner you can always rely on.

# **TRANS**









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