

The Differences of TRANS Family Members

The innovative TRANS sensor family created by IR-TEC offers a variety of solutions for all types of applications that require occupancy sensing based control or daylight harvesting control. In addition to the interchangeable mounting and lens options, each TRANS family member features unique functionality and output for various control applications.



A. Line Voltage Sensors

Line Voltage Sensors are designed to operate with line voltage power, and provide direct switching control of the connected load with or without ambient light sensing (ALS) capability. The table below outlines basic specifications, control design, and applications notes of manual setting line voltage sensors to allow for ease of product selection.

Occupancy Sensors

Model No.	Setting	Tech	ALS	Power	Output	HS*	Connection	Feature & Control
LOD-500Sxx	MODE TIME DIM	PIR	•	120/277 VAC	SLV AO		Wire Lead	8 control modes selectable 0-10V bi-level dimming control
LOD-509Sxx	MODE TIME DIM	PIR	•	120/277 VAC	SLV AO	•	Wire Lead	8 control modes selectable SmartDIM continuous dimming control
LOS-500Nxx	TIME	PIR		120/277 VAC	SLV		Wire Lead	All time ON/OFF switching
LOS-500Sxx	TIME	PIR	•	120/277 VAC	SLV	•	Wire Lead	ON/OFF switching with ALS override
LOS-509Sxx	LUX							
LRD-509Sxx	As per remote	PIR	•	120/277 VAC	SLV AO	•	Wire Lead	Multi mode, multi-level/SmartDIM dimming control via remote programmer

Daylight Sensors

Model No.	Setting	Tech	ALS	Power	Output	HS*	Connection	Feature & Control
LPS-509Sx	TIME LUX	ALS	•	120/277 VAC	SLV	•	Wire Lead	7 level LUX and TIME selection Standalone ON/OFF control

*HS denotes sensor with Hybrid Switching

PRODUCT BULLETIN



B. Low Voltage Sensors

Low Voltage Sensors are designed to operate with low voltage power, and provide various outputs for versatile control applications. The table below outlines basic specifications, control design, and applications notes to allow for ease of product selection.

Occupancy Sensors

Model No.	Setting	Tech	ALS	Power	Output	Connection	Feature & Control
BOA-516Sxx	MODE TIME DIM	PIR	•	12-24 VDC	AO	Push-in Terminal	8 control modes selectable 0-10V bi-level dimming control
BOA-517Sxx	TIME LUX	PIR	•	12-24 VDC	AO DO	Push-in Terminal	0-10V bi-level dimming control with 30% low dim
BOM-514Sxx BOM-515Sxx	TIME LUX	PIR	•	5-12 VDC 12-24 VDC	DO2	Push-in Terminal	For multi-channel bi-level or daylight harvesting control with, or without BEMS
BOS-515Nxx	ON OFF	PIR		12-24 VAC/DC	IDC	Push-in Terminal	For occupancy based lighting, HVAC, or BEMS control
BOS-515Sxx	TIME LUX	PIR	•	12-24 VAC/DC	IDC	Push-in Terminal	For occupancy based lighting and BEMS control
COS-516Sxx	MODE TIME DIM	PIR	•	12-48 VDC	RDP	Push-in Terminal	8 control modes selectable For LED lighting with CV driver

Daylight Sensors

Model No.	Setting	Tech	ALS	Power	Output	Connection	Feature & Control
BPD-500Sx	LUX	ALS	•	12-24 VDC	IDC AO	Wire Lead	Provide IDC for ON/OFF control and AO for BMS control
BPD-502Sx	DIM	ALS	•	12-24 VDC	IDC AO	Wire Lead	Provide IDC for ON/OFF switching and AO for SmartDIM control

Legends
SLV: Switched Line Voltage
DO: Digital Output
HS: Hybrid Switching

AO: Analog Output (0-10V)
DO2: Digital Output x 2

IDC: Isolated Dry Contact
RDP: Regulated DC Power