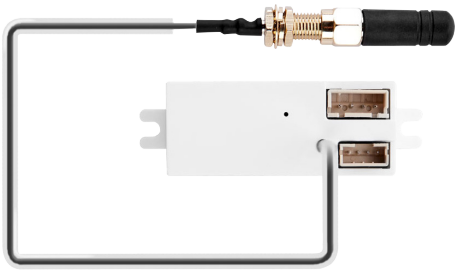
Project: _____ Distr./entr.: _____

Type: _____ PO: _____ Date: _____

Technilight SMART

TSBCA2DL

12V BT Long-range fixture adapter



Description

TSBCA2DL fixture controllers are designed to increase the Bluetooth signal in a networked lighting control system, especially for outdoor applications. They feature an external long-range antenna that extends wireless coverage for outdoor motion detection linkage. Sensors are not needed if it is used as a Bluetooth node.

Features

- 12VDC input.
- Integrated Bluetooth module.
- Includes connection port for long-range antenna with up to 1640ft range.
- Bluetooth long-range transmission range (TSTX1 antenna included).
- Designed to integrate into luminaires for Luminaire Level Lighting Control (LLLC).
- Sensor-ready attachment port for Technilight Smart Eco Sensors (CC cable required).
- 0-10V output.
- TSCD30 cable included.

Requirements

- Dim to OFF driver with 12VDC output.

Notes

All application environments will not necessarily be able achieve max signal range due to factors such as signal obstructions, interference, and luminaire/housing design. Testing is recommended to ensure performance for the applications.

Specifications

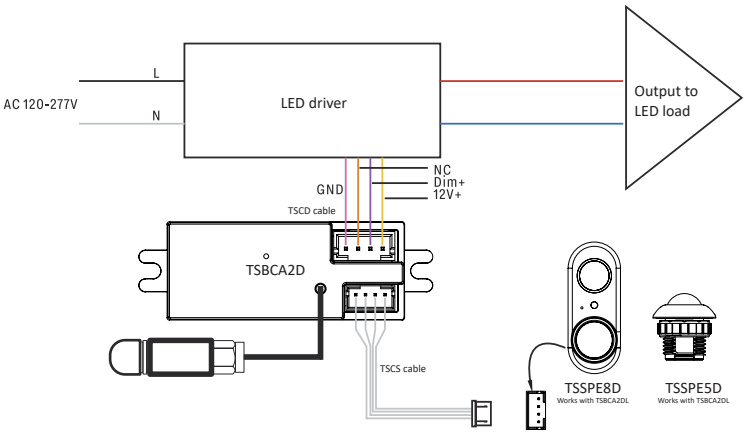
Input voltage	DC 12V
Power supply source	Min 150mA
Dimming	Class 2, 0-10V DC 10mA Max
Sinking current	10mA Max
Bluetooth transmit	TX1: 860’ Max TX5: 1640’ Max
Radio frequency	2.4GHz ± 75MHz
Bluetooth version	5.0
Housing material	UL 94-V0
Detection range	40-80’
Mounting height	20-40’
Indoor / outdoor Use	Indoor / Outdoor Use
Operating temperature	-30°C ~ 65°C, -22°F ~ 149°F
Storage temperature	-30°C ~ 85°C, -22°F ~ 185°F
IP rating	IP20
Antenna	IP65
Color	White
Warranty	5 years
Compliance	UL8750, RoHS
Safety	cULus Recognized Component LED Controller E547370 DLC: coming soon

Information subject to change without notice. Pictures for illustration purpose only. rev. 2.5.4

Ordering information - accessories

Model	Description
TSCS30	2468 24AWG white 300V 80°C Length: 300mm, PH2.0-4P on both sides of the cable between the adapter and the sensor
TSCS60	2468 24AWG white 300V 80°C Length: 600mm, PH2.0-4P on both sides of the cable between the adapter and the sensor
TSCS120	2468 24AWG white 300V 80°C Length: 1200mm, PH2.0-4P on both sides of the cable between the adapter and the sensor
TSCD30 (included)	1007 22AWG white 300V 80°C Length: 300mm, XH2.54-4P on left side cable (to TSBCA2DL), 10mm dipped tin on right side (to LED driver)
TSCD60	1007 22AWG white 300V 80°C Length: 600mm, X H2.54-4P on left side cable (to TSBCA2DL), 10mm dipped tin on right side (to LED driver)
TSSPE5D	PIR sensor, DLH
TSSPE8D	PIR sensor, DLH
TSTX1 (included)	Antenna 2,4G-1dbi
TSTX5	Antenna 2,4G-5dbi

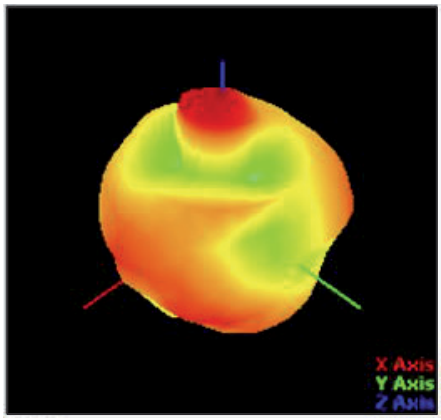
Wiring



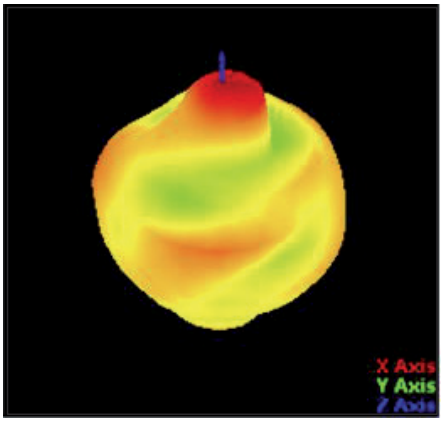
FFC (24 AWG)			
WHITE	WHITE	WHITE	WHITE
GROUND	PHO	PIR	12V +

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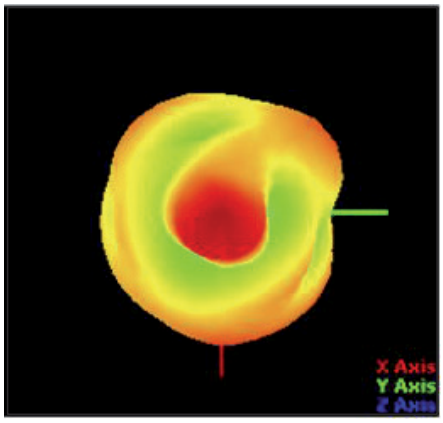
TSTX1 transmission



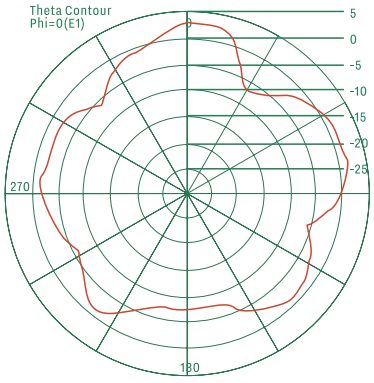
T45-P45



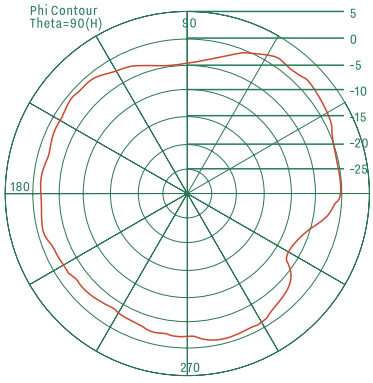
T45-P225



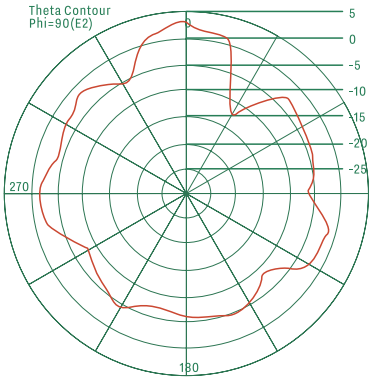
T0-P0



XOZ



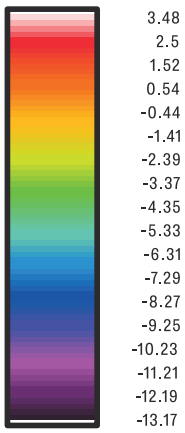
XOY



YOZ

Wireless signal strength	
Transmission distance	RSSI (dbm)
164' (50 m)	-43
328' (100 m)	-45
492' (150 m)	-49
656' (200 m)	-54
820' (250 m)	-57
860' (262 m)	-58

Note: The test transmission distance of two TSBCA2DL

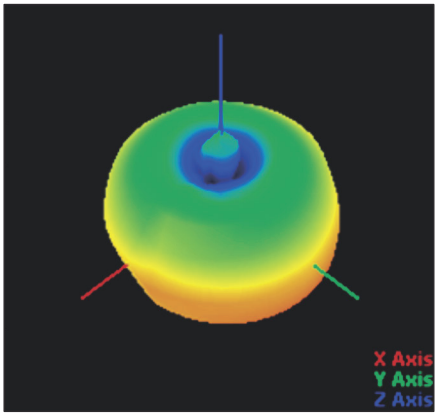


Coordination system decription:

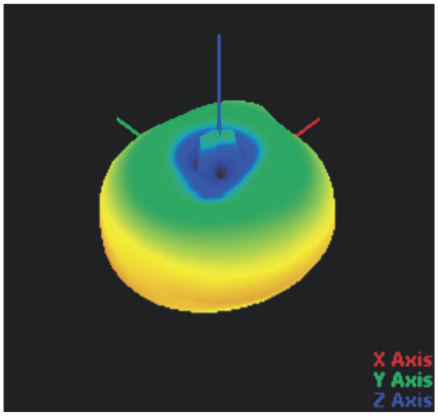
Line color	**XYZ**	**Theta-Phi**
Red	**Axe X**	**Theta90-Phio**
Green	**Axe Y**	**Theta90-Phi90**
Blue	**Axe Z**	**Theta0**

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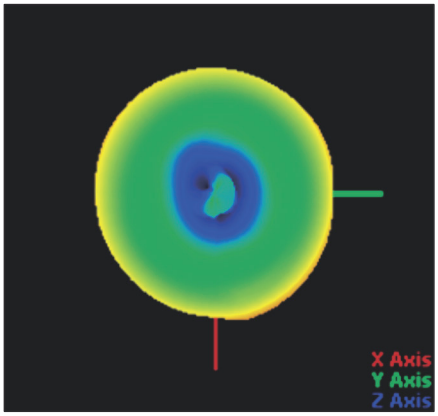
TSTX5 transmission



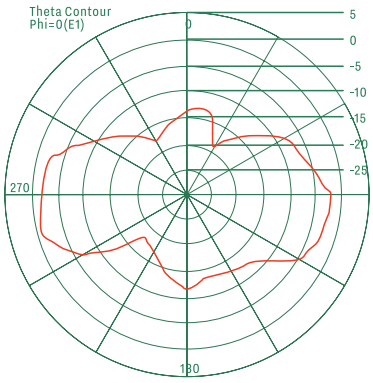
T45-P45



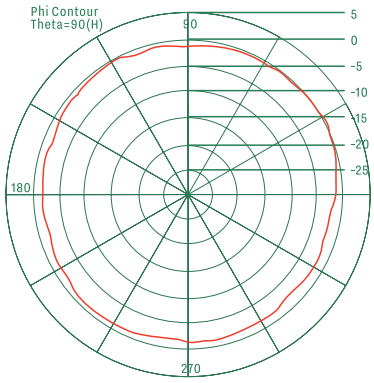
T45-P225



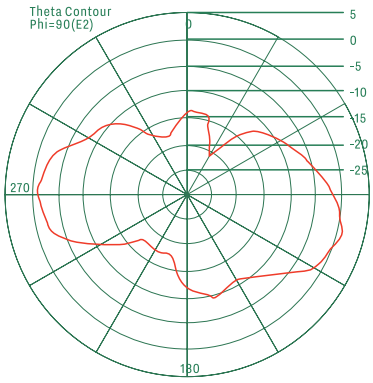
T0-P0



XOZ



XOY



YOZ

Wireless signal strength	
Transmission distance	RSSI (dbm)
328' (100 m)	-37
656' (200 m)	-47
984' (300 m)	-48
1 312' (400 m)	-59
1 640' (500 m)	-60

Note: The test transmission distance of two TSBCA2DL



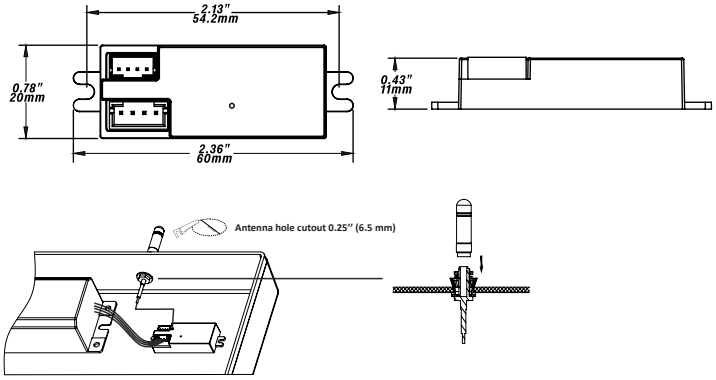
5.4
3.89
2.38
0.87
-0.65
-2.16
-3.67
-5.18
-6.69
-8.21
-9.72
-11.23
-12.74
-14.26
-15.77
-17.28
-18.79
-20.31

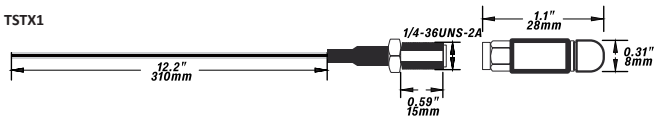
Coordination system decription:

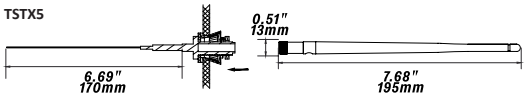
Line color	**XYZ**	**Theta-Phi**
Red	**Axe X**	**Theta90-Phio**
Green	**Axe Y**	**Theta90-Phi90**
Blue	**Axe Z**	**Theta0**

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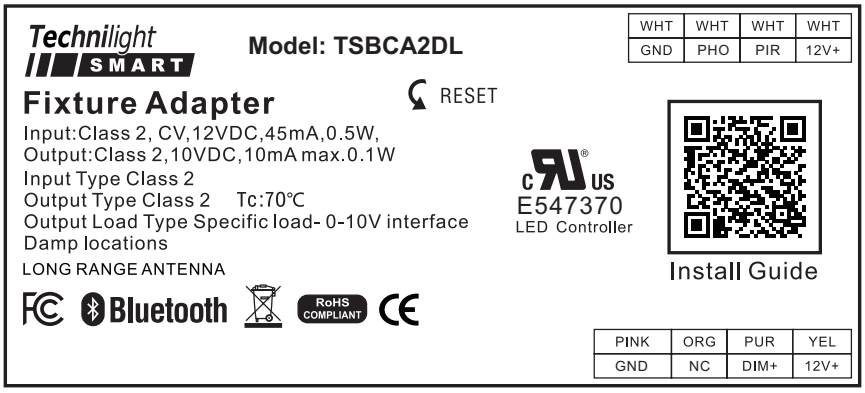
Dimensions







Label product



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Application

Technilight Smart
Google play
Android

Technilight Smart
Apple store
iOS

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