



Technical Specifications

ILD 10 MVOLT LQD 10-55

Constant Power Emergency LED Driver



General Information

Type	Constant Power, Class2
Output Power	10W (Max.)
Features	Constant power performance Minimum mounting footprint Self diagnostic / Self testing Listed for factory and field installation AC activate Quick disconnect

Environmental Specifications

Ambient Operating Temperature	0°C to 55°C
Case Temperature (Tc)	61°C
Storage Temperature (Ta)	-20°C to 25°C
Max. Relative Humidity (%)	85% non-condensing
CEC	Compliant
UL Rating	Dry and Damp
UL File number	E71446
EMI Compliance	FCC Part 15 Class A
Approval	UL listed for factory and field installation CSA C222 No. 141 CA T20 appliance efficiency database

Products

Item Number	
*291KS6	ILD 10 MVOLT LQD 10-55 TBTSPLENUMSS M6
*291KS7	ILD 10 MVOLT LQD 10-55 TBTSPLENUMWHT M6
*291KS8	ILD 10 MVOLT LQD 10-55 TBTSPLENUMBLK M6

Electrical Specifications

Input

Input Voltage (VAC)	120-277VAC (MVOLT)
Frequency Range (Hz)	50 – 60 Hz
Input Current (mA)	20 (max)
THD	Non-regulated
Power Factor (PF)	Non-regulated

Output

Output Voltage ¹ (VDC)	10-55VDC (Auto-Sense)
Output Current (A)	1.0A (@10VDC) - 0.18A (@55VDC)
Max. Output Power (W)	10W (constant)
Max. AC Driver Output Current (A)	3.0A
Emergency Operation	90 minutes

1 Output is UL 1310 Certified, Output Class 2 Compliant

Battery

Lithium Iron-Phosphate
24-Hour Recharge
5 to 7-Year Life Expectancy

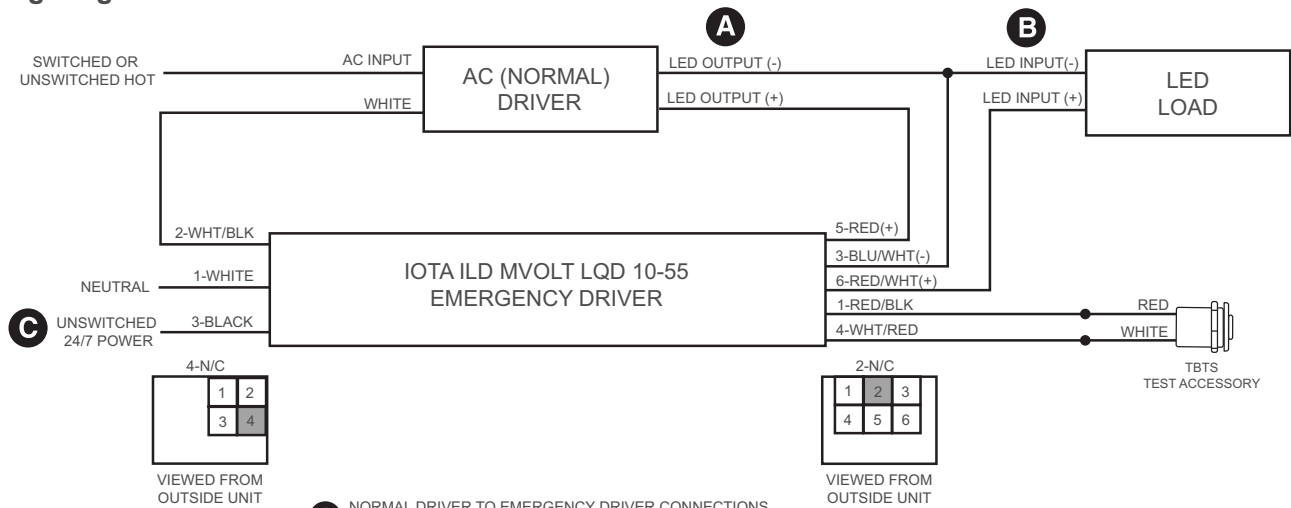


Ordering Guide

ILD	10	MVOLT	LQD	10-55	
ILD	IOTA Emergency LED Driver with Lithium Battery Technology				
10	Emergency Output Wattage (constant)				
MVOLT	120-277VAC Input				
LQD	Linear Profile with Quick Disconnect Harness				
10-55	10-55VDC Class 2 Output Voltage				
	TBTSPLENUMSS - Stainless Steel Switch IP67 TBTS with Plenum-rated (CMP) Wire TBTSPLENUMWHT - White Plastic TBTS with Plenum-rated (CMP) wire TBTSPLENUMBLK - Black Mushroom Top Plastic IP67 TBTS with Plenum Rated (CMP) Wire				

ILD 10 MVOLT LQD 10-55 - Technical Specification

Wiring Diagram



A NORMAL DRIVER TO EMERGENCY DRIVER CONNECTIONS. OBSERVE PROPER POLARITY

B LED ARRAY CONNECTIONS. OBSERVE PROPER POLARITY

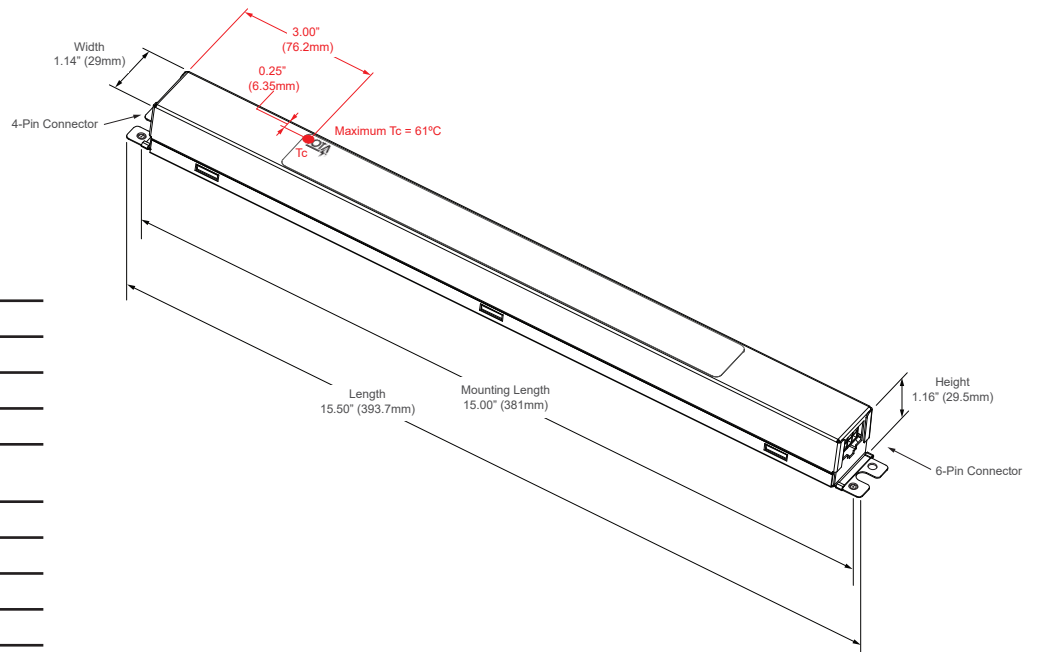
C THE BATTERY OF THE EMERGENCY DRIVER REQUIRES UNSWITCHED POWER, THEREFORE THE SECOND AC INPUT MUST BE WIRED AHEAD OF THE LOCAL SWITCH.

NOTE: THE TBTS OF THIS UNIT SERVES AS THE UNIT CONNECTOR. TO INITIATE OPERATION, THE TBTS MUST BE CONNECTED AND AC POWER MUST BE SUPPLIED.

Note: The maximum distance the test switch can be mounted from the unit is 50 feet.
For maximum suggested remote mounting distance, see table below.

Load Voltage	0 Feet	5 Feet	10 Feet	15 Feet	20 Feet	25 Feet	30 Feet	35 Feet	40 Feet	45 Feet	50 Feet
10V	X	X	—	—	—	—	—	—	—	—	—
15V	X	X	X	X	X	—	—	—	—	—	—
20V	X	X	X	X	X	X	X	—	—	—	—
25V	X	X	X	X	X	X	X	X	X	X	X
30V	X	X	X	X	X	X	X	X	X	X	X
35V	X	X	X	X	X	X	X	X	X	X	X
40V	X	X	X	X	X	X	X	X	X	X	X
50V	X	X	X	X	X	X	X	X	X	X	X
55V	X	X	X	X	X	X	X	X	X	X	X

Mechanical Diagram



Mechanical Specifications

Length	15.50" (393.7mm)
Width	1.14" (29mm)
Height	1.16" (29.5mm)
Mounting Length	15.00" (381mm)

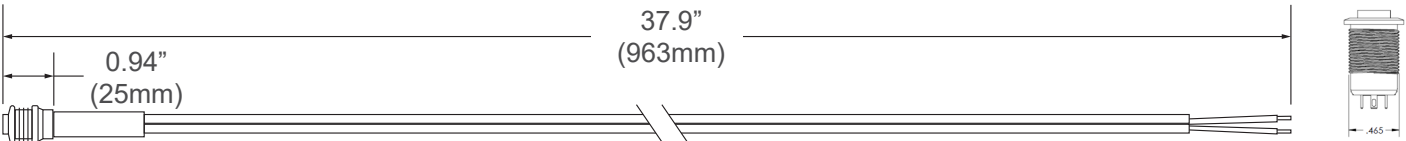
Tc Specifications

Tc Point located on label side of product	
From edge	0.25" (6.35mm)
From end	3.00" (76.2mm)
Maximum Tc = 61°C	

ACCESSORIES

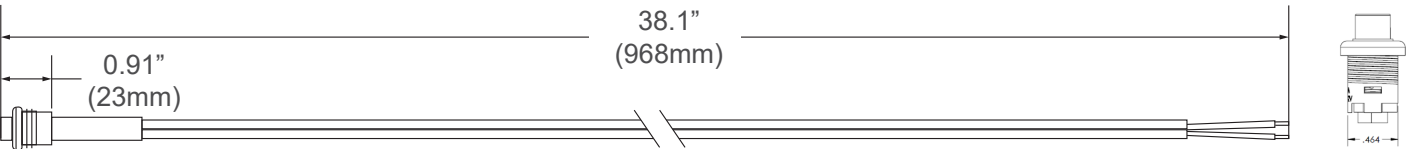
KIT ILD TBTS 2V STAINLESS IP67 PLENUM M10 (*285C62)

Replacement Architectural Stainless Steel Test Switch Accessory Kit that ships standard, 2V TBTS, Bi-Color, IP67, Plenum rated (CMP) wire.



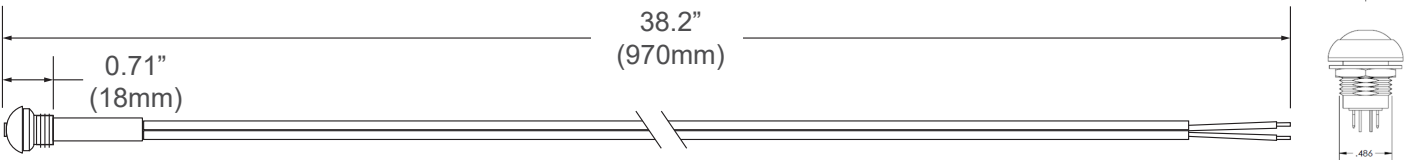
KIT ILD TBTS 2V PLASTIC WHT PLENUM M10 (*287YKW)

Optional White Plastic Test Switch Accessory Kit, 2V TBTS, Bi-Color

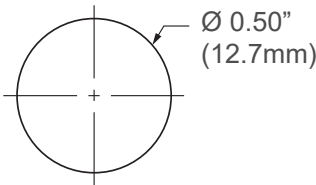


KIT ILD TBTS 2V PLASTIC BLK IP67 PLENUM M10 (*287JCP)

Optional Black Plastic Test Switch Accessory Kit, 2V TBTS, Bi-Color.

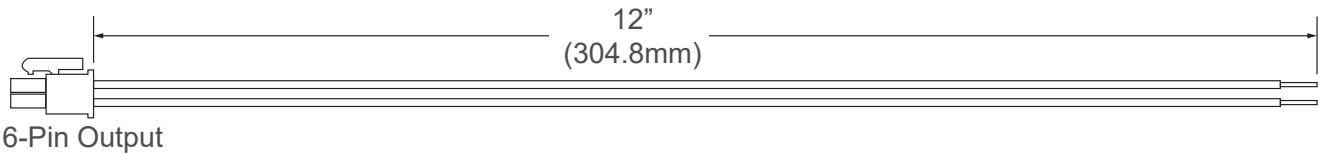
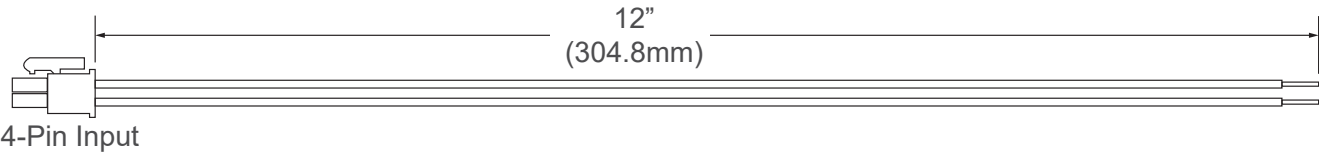


Suggested Knockout Dimension for All

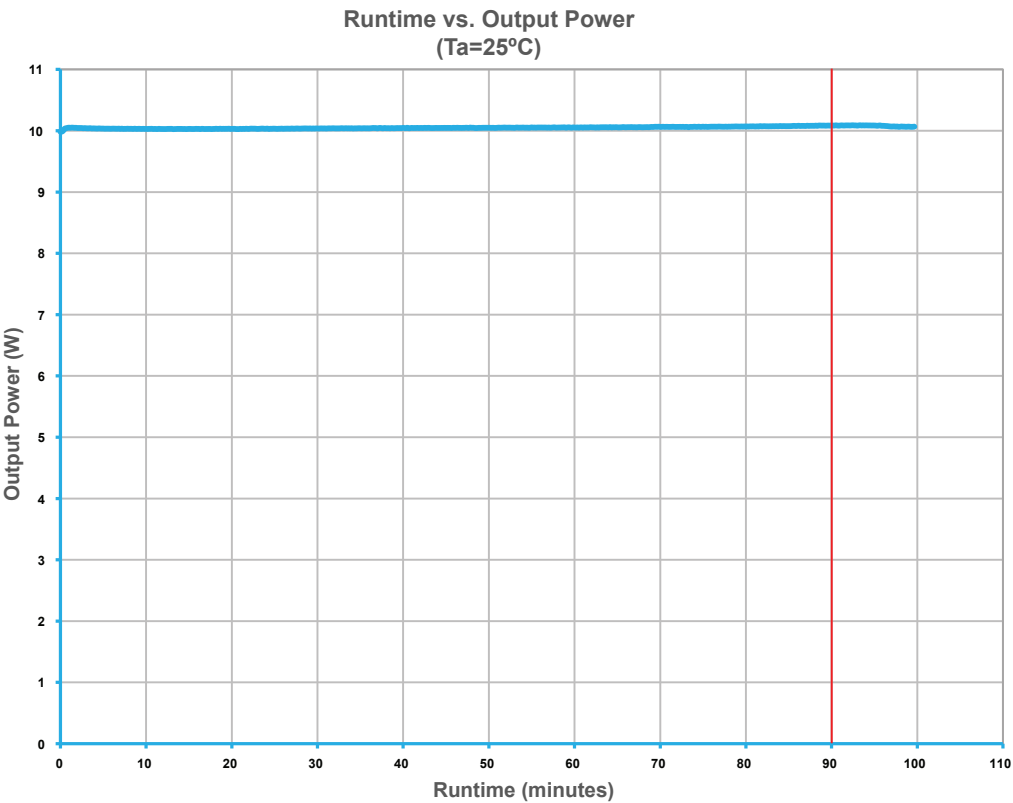


KIT ILDQDV1 I/O HARNESS M10 (*287JCG)

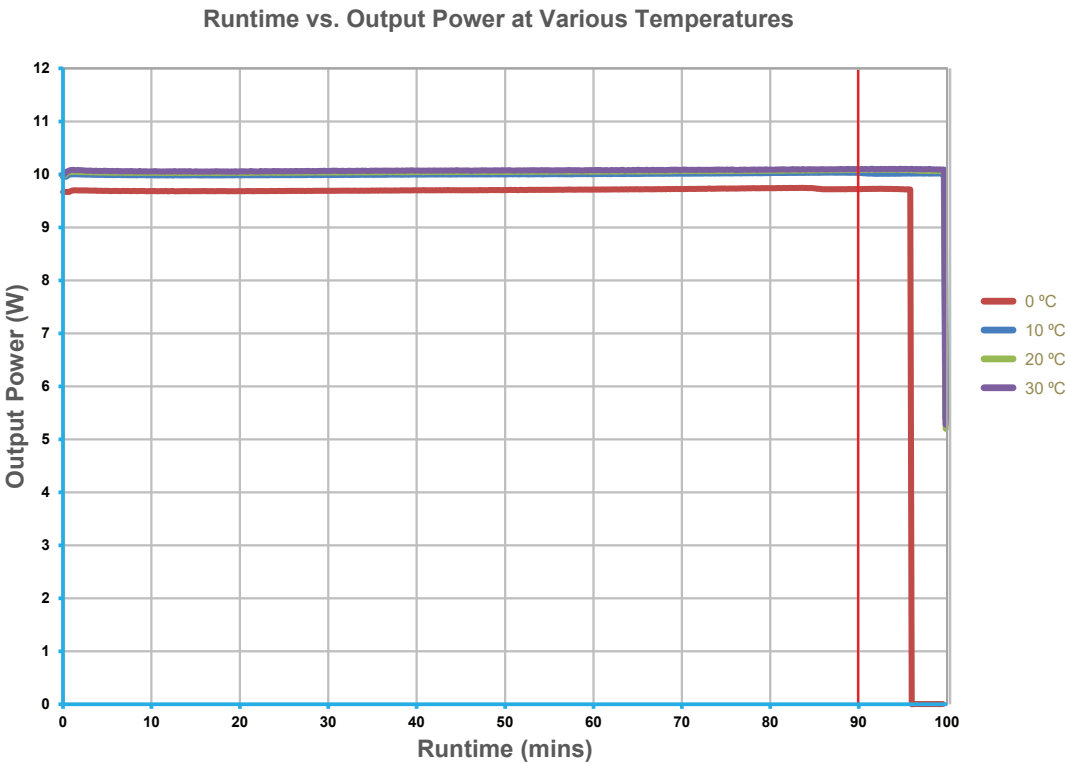
Replacement Quick disconnect input and output harnesses which ships standard with the product. 12-inch lead length.



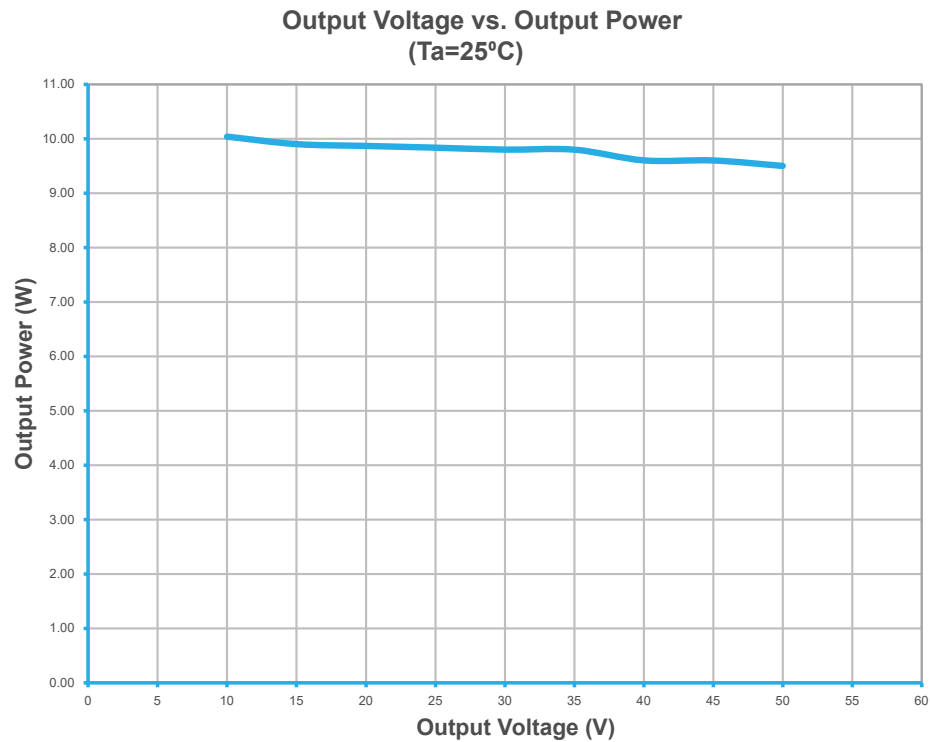
Runtime vs. Output Power



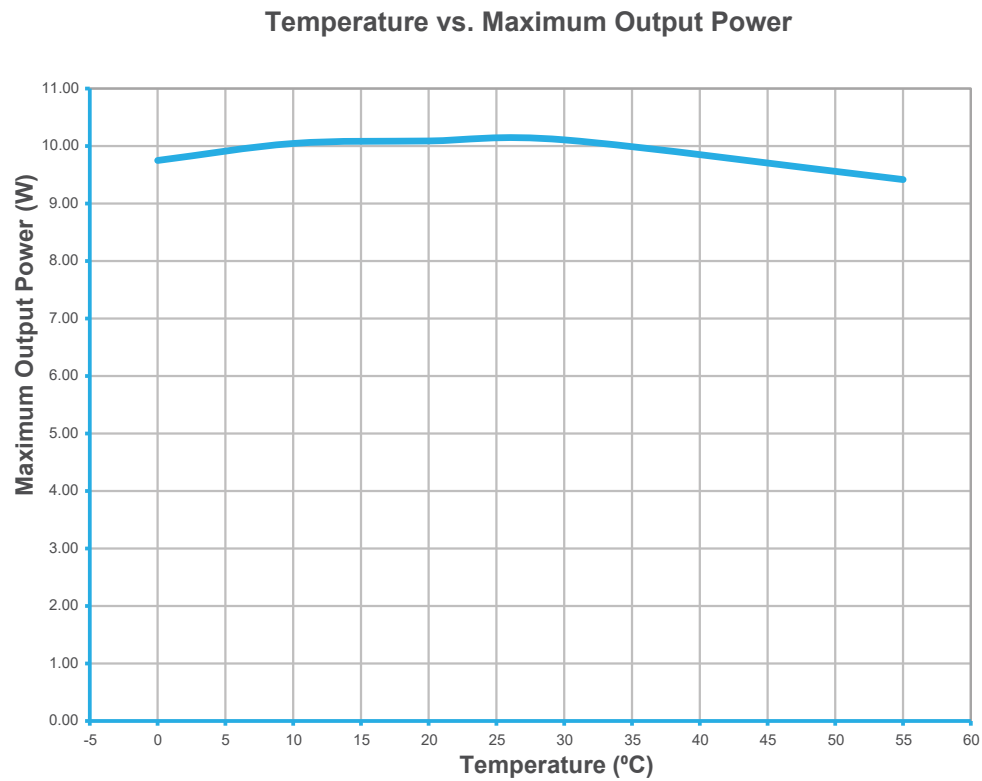
Runtime vs. Output Power at Temperatures



Output Voltage vs. Output Power



Temperature vs. Maximum Output Power



Constant Power

Emergency LED Drivers deliver a constant wattage to the LED array, providing non-diminishing light output for the full emergency runtime.

Quick Disconnect

Product features quick-disconnect ports for connections to the AC input, normal LED driver, LED load, and test accessories.

AC Activate

Detects the presence of AC power needed to charge the internal batteries of an emergency driver and automatically commissions the driver when AC Power is permanently supplied, thus eliminating the need for manually connecting the battery during installation.

Disabling AC Activate:

- 1) Remove AC power from the luminaire. The emergency unit will then power the luminaire from the battery circuit.
- 2) Disconnect the battery circuit through one of the following methods:

Method 1: Press and hold the TBTS button for six seconds until LED Module shuts off.

Method 2: Unplug the TBTS.

Enable AC Activate:

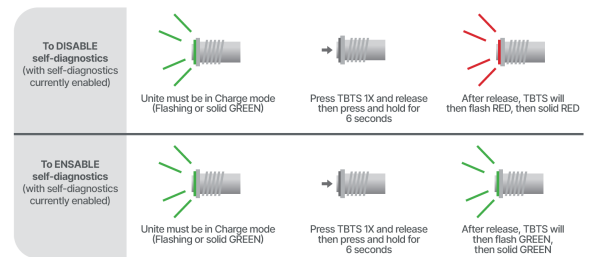
- 1) Reconnect the TBTS (If unplugged) and restore AC power to the emergency luminaire. The AC Activate circuitry will detect the presence of AC power and automatically re-activate the battery charging circuit.

Self-Diagnostics / Self-Testing

Monthly and annual self-testing feature satisfies the periodic testing requirements in accordance with NFPA 101 while the on-board diagnostics provides system readiness with visual indicators.

Disabling Self-Diagnostics:

- 1) Unit must be in Charge mode (flashing or solid GREEN)
- 2) Press TBTS 1X and release, then press and hold for 6 seconds
- 3) After release, TBTS will then flash RED, then solid RED



Enable Self-Diagnostics:

- 1) Unit must be in Charge mode (flashing or solid GREEN)
- 2) Press TBTS 1X and release, then press and hold for 6 seconds
- 3) After release, TBTS will then flash GREEN, then solid GREEN

Warranty

IOTA Products are covered by a 5-year limited warranty. Complete warranty terms can be found at: <https://www.acuitybrands.com/-/media/abl/acuitybrands/files/support/warranty/abl-emergency-commercial-product-battery-limited-warranty.pdf>.

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Specifications subject to change without notice. Actual performance may differ as a result of end-user environment and application.