

# CoreSync Gateway 90W >

The CoreSync Gateway 90W is a low voltage power distribution and network connected module compliant with the IEEE 802.3bt standard that utilizes enhanced 90W-per-port PoE technology.

This Gateway 90W receives a minimum guaranteed 71.3 watts of usable power from a PoE Network Switch, ensuring control and secure two-way communication with lights, sensors, and other CoreSync Daisy-Chain devices in a CoreSync-enabled building infrastructure.



## FEATURES AND ADVANTAGES

IEEE 802.3bt compliant device	Uses low voltage PoE infrastructure for power and communication with lights, sensors, and other devices
Input power up to 90W	Capable of powering a single or multiple CoreSync devices
CoAP network communication	Easy and secure convergence of IP infrastructure
CoreSync Enabled	Daisy-Chain capable with easy connection to all CoreSync devices
UL 2108 listed	Safe operation and industry standard compliance

## SPECIFICATIONS

### Electrical

**Nominal Operating Voltage:** 42-57VDC  
**Maximum Input Current:** 1.73A  
**Maximum Power Input:** 90W at 1.73A  
**Maximum Power Output:** 90W at 1.73A  
**Nominal Power Input:** 71.3W at 1.73A (as per 802.3bt Type 4 Standard)  
**Standby Power Consumption:**  
 2.0W at No Load  
**Power Consumption at 71.3W:**  
 3.2W (10.95 BTU/hr)  
**Power Consumption at 94.1W:**  
 4.3W (14.7 BTU/hr)

### Commercial Standards

**PoE, PoE+, IEEE 802.3bt**  
**Class 2 Electrical Device**  
**UL 2108 Listed**  
**CSA22.2 No. 250**  
**UKCA**  
**BIS**  
**FCC Part 15 Subpart B**  
**Plenum Rated**

### Product Safety

Internal Over-Temperature Protection  
 DO NOT hot swap

### Mechanical

**Housing Material:** Extruded Aluminum  
**Length:** 117.7 mm (4.63 in)  
**Width:** 53.33 mm (2.10 in)  
**Height:** 25.51 mm (1.00 in)  
**Weight:** 104 g (3.66 oz)

### Environmental

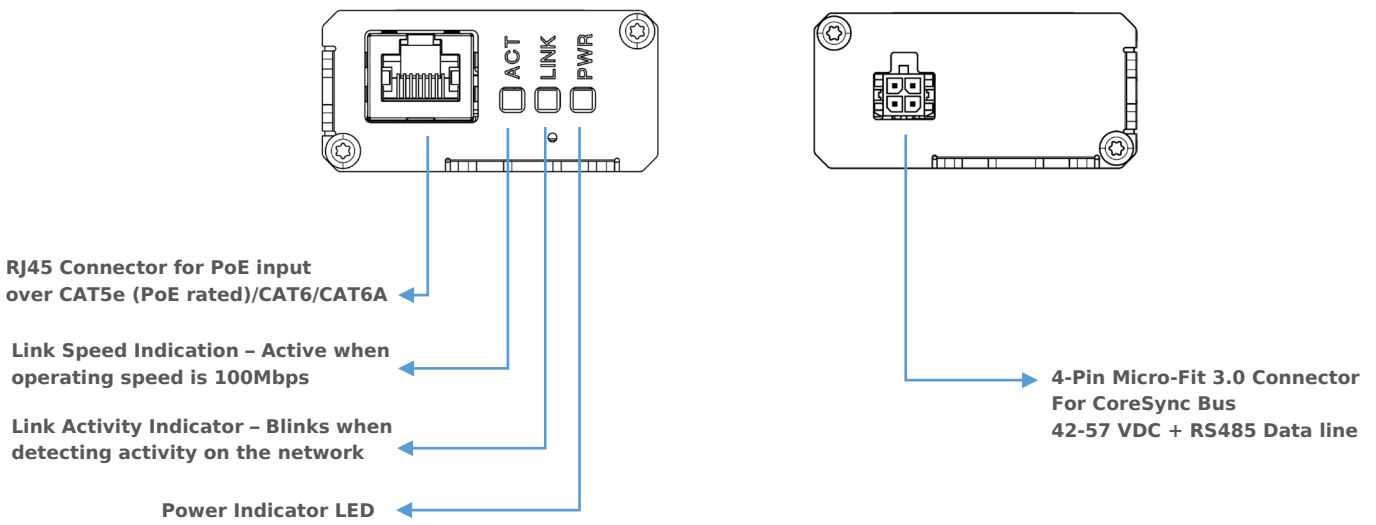
**Ambient Temp Range:**  
 0 to 40°C (32 to 104°F)  
**Storage Temperature:**  
 - 40 to 85°C (-40 to 185°F)  
**Max. case temperature:**  
 90°C for Metal Enclosure  
**Relative Humidity:**  
 10-80% Non-Condensing  
**Environmental Rating:** Indoor

[www.molex.com/products/coresync/](http://www.molex.com/products/coresync/)

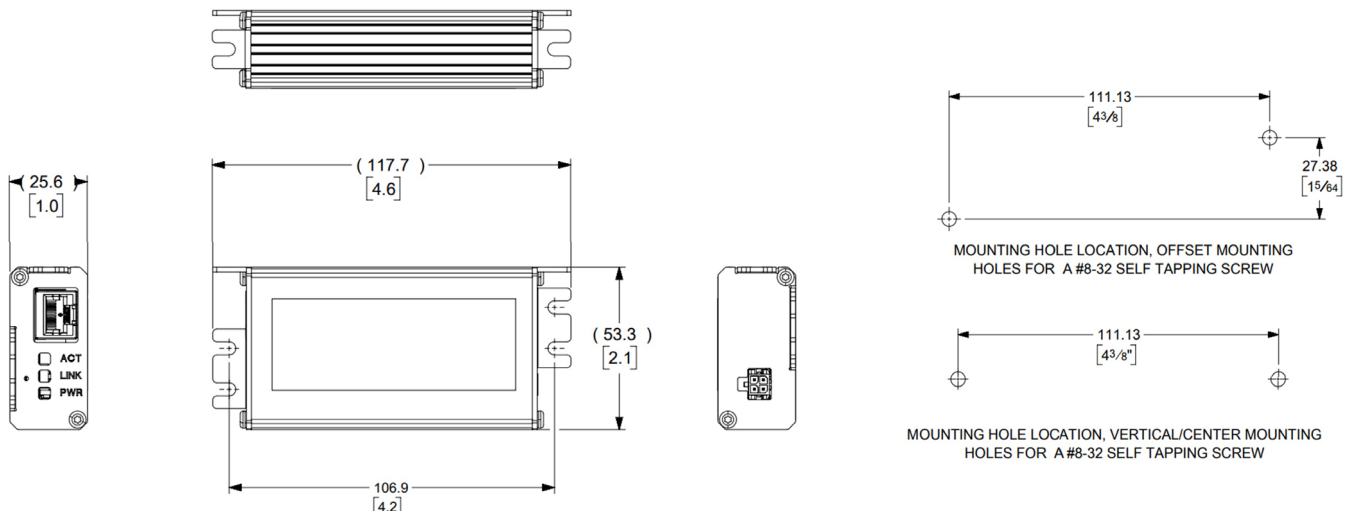
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## CONNECTION INTERFACES

Connection	Connection Specification
PoE Input	RJ45, CAT 5e (PoE rated) cable (visit <a href="https://www.molexces.com/products/copper/">https://www.molexces.com/products/copper/</a> )
CoreSync Output	4-Pin Micro-Fit 3.0 Connector for CoreSync Harness (visit <a href="https://www.molexces.com/product/coresync-led-cable-harnesses-for-poe-gateways-and-drivers/">https://www.molexces.com/product/coresync-led-cable-harnesses-for-poe-gateways-and-drivers/</a> )



## Dimensions



[www.molexces.com/products/coresync/](http://www.molexces.com/products/coresync/)

# CoreSync Gateway 90W

## ORDERING INFORMATION

Order No.	Description
180798-1000	CoreSync Gateway 90W 802.3bt, Slvr Metal

## RELATED PRODUCTS

Molex Series	Description	Gauge / conductor	Start	End	Plenum rated Cable
180777, 180778	CoreSync Daisy-Chain	20/4	4-pin Micro-Fit receptacle	4-pin Micro-Fit receptacle	No
182106-XXX	CoreSync Extender, 2- Gender		4-pin Micro-Fit receptacle	4-pin Micro-Fit plug	No
182110-00XX	CoreSync Extender, 2-Gender Panel Mount		4-pin Micro-Fit receptacle	4-pin Micro-Fit Plug Panel Mount	No
182110-4XXX	CoreSync Long-Run Cable	18/4	4-pin Micro-Fit receptacle	4-pin Micro-Fit receptacle	Yes
182110-5XXX	CoreSync Poke-In Extender		4-pin Micro-Fit receptacle	4-way Poke in	Yes
182110-6XXX	CoreSync Extender, 2- Gender		4-pin Micro-Fit receptacle	4-pin Micro-Fit plug	Yes

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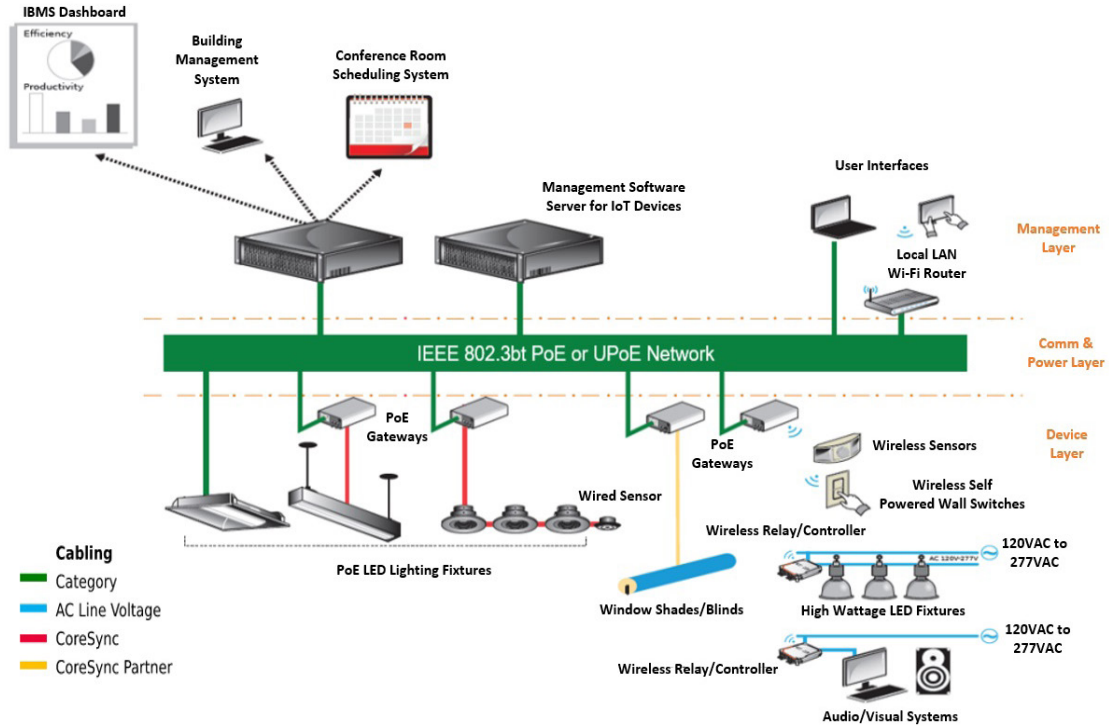
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SK/2024.04

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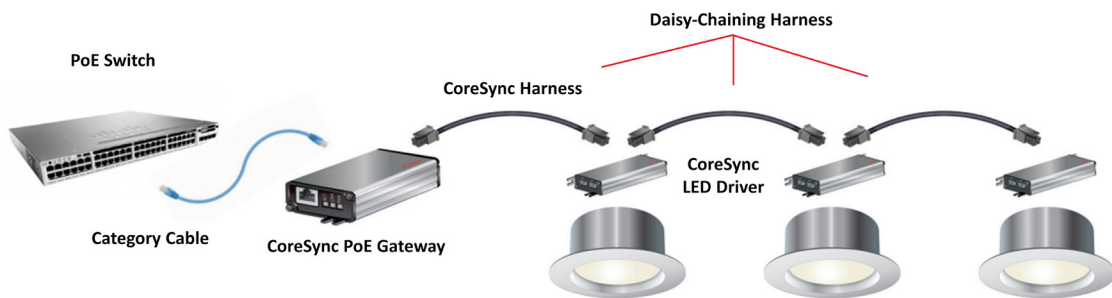
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## TYPICAL APPLICATION



## DAISY-CHAINING

The CoreSync PoE Gateway 90W receives power and data from a PoE Network Switch via Category cable. From the PoE Switch, the minimum guaranteed power at the input of the PoE Gateway 90W is 71.3W. If the total power requirement on the Gateway is below 71.3W for the IEEE 802.3bt 90W standard, a single PoE Gateway 90W can power and control multiple LED Drivers, sensors, and other CoreSync devices in a Daisy-Chain configuration, with the easy-to-use input and output connector scheme. Each CoreSync Daisy-Chain device can be powered and physically connected to a CoreSync PoE Gateway 90W with a rugged and reliable Molex CoreSync Harness cable, using a Molex Micro-Fit 3.0 4-pin connection.



The total power budget on the Gateway must comply with the IEEE 802.3bt standard, and considers the load power, power drop on CoreSync devices in the Daisy-Chain—including the Gateway, and interconnect losses. The overall voltage drop and power drop can be calculated prior to the design. Please refer to CoreSync Harness Length Calculator to calculate the maximum run distance.

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