

CoreSync Gateway 60W, Constant Voltage >

The CoreSync 60W, Constant Voltage Gateway is a low-voltage power distribution and network connected module compliant with the IEEE 802.3at standard and Cisco's UPOE standard that utilizes Power over Ethernet technology.

This CoreSync Gateway receives a minimum guaranteed 51 watts of usable power from a PoE Network Switch. Of the total 51W, up to 43.2W can power and control constant voltage LED fixtures, with the difference offering secure two-way communication with other CoreSync Daisy-Chained devices.



FEATURES AND ADVANTAGES

Cisco UPOE compliant device	Uses low voltage PoE infrastructure for power and communication with lights, sensors, and other devices
Input power up to 60W	Capable of powering a single or multiple CoreSync devices
24V Constant Voltage Output	Power and dimming control of constant voltage fixtures up to 43.2W
CoAP network communication	Easy and secure convergence of IP infrastructure
CoreSync Enabled	Daisy-Chain capable with easy connection to all CoreSync devices
UL 1310 listed	Safe operation and industry standard compliance

SPECIFICATIONS

Electrical

Maximum Power Input:

60W at 42-57VDC

Maximum Power Output: 54.3W

Nominal Power Input:

51W (as per UPOE Standard)

Maximum LED Power Output:

43.2W at 24V

Standby Power Consumption:

2.0W at No Load

Power Consumption at 51W Input:

5.3W (18.08 BTU/hr)

Efficiency at full load:

90% (typical) at 52VDC input

Product Safety

Output Over-Current Protection

Internal Over-Temperature Protection

DO NOT hot swap

Commercial Standards

PoE, PoE+, UPOE

Class 2 Electrical Device

UL 1310 Listed

CSA22.2 No. 250

FCC Part 15 Subpart B

Plenum Rated

UKCA

BIS

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: 115 g (4.05 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

Relative Humidity:

10-80% Non-Condensing

Environmental Rating: Indoor

Dimming Performance

Dimming: PWM

Dimming Type: Linear

Dimming Frequency: 25KHz

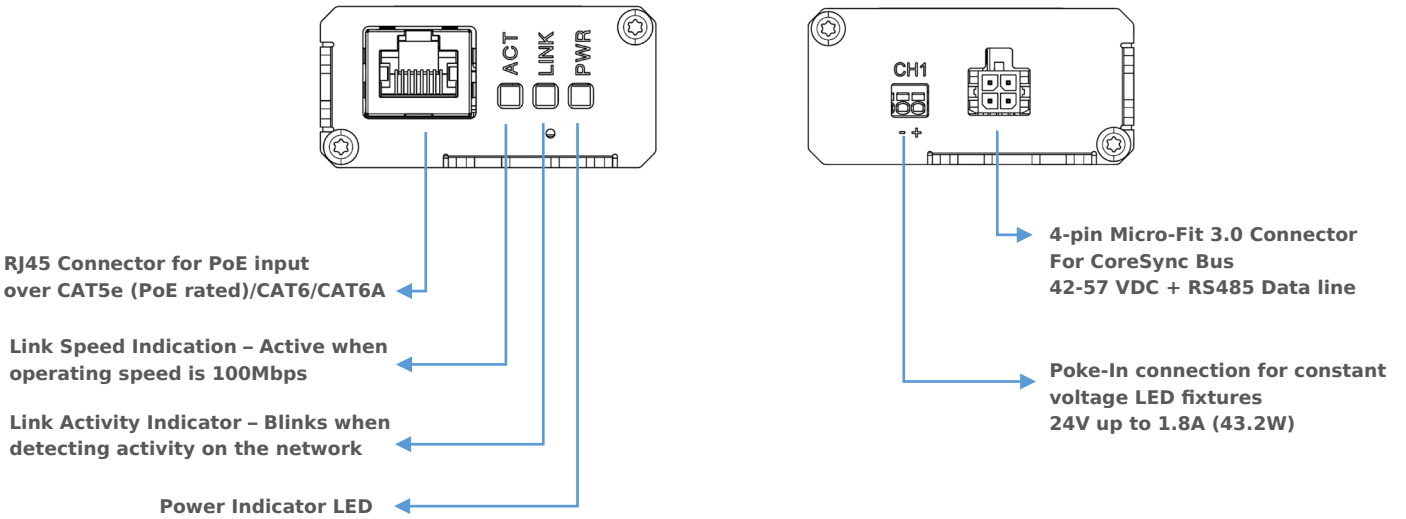
Dimming Range: 1-100%

www.molex.com/products/coresync/

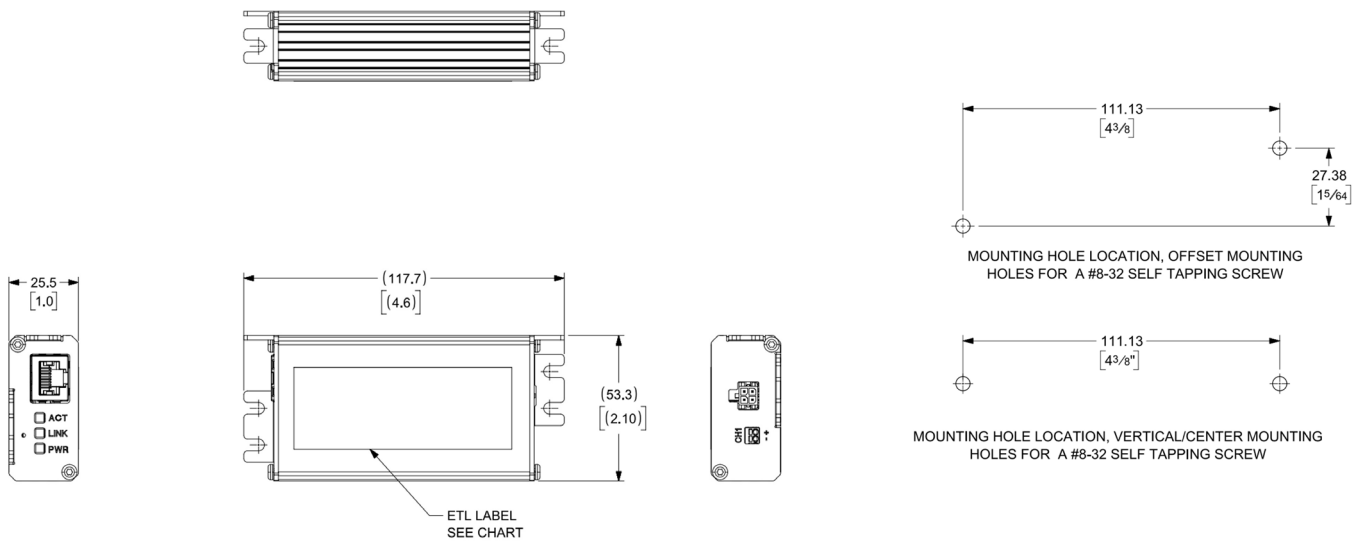
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CONNECTION INTERFACES

Connection	Connection Specification
PoE Input	RJ45, CAT 5e (PoE rated) cable (visit https://www.molexces.com/products/copper/)
CoreSync Output	4-Pin Micro-Fit 3.0 Connector for CoreSync Harness (visit https://www.molexces.com/product/coresync-led-cable-harnesses-for-poe-gateways-and-drivers/)
LED Output	Poke-in Connector, solid core or stranded-tinned, 20-22AWG, 6mm strip length <ul style="list-style-type: none"> • CH1 – LED Fixture



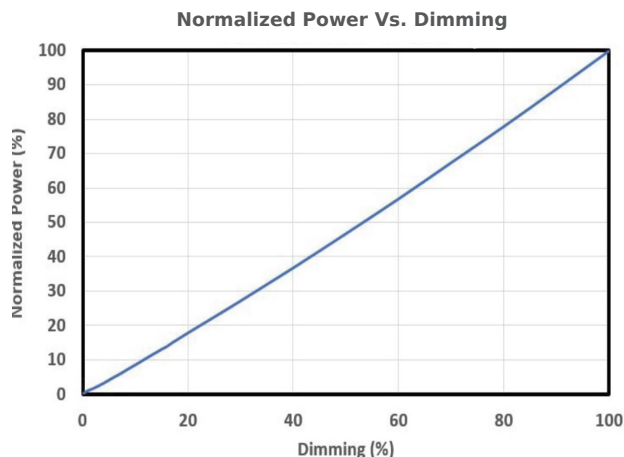
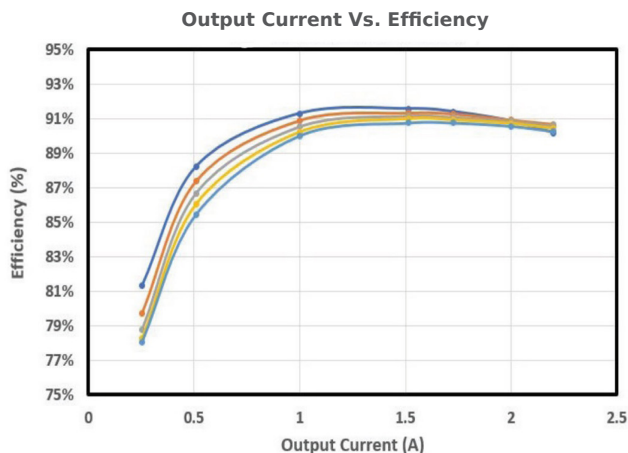
Dimensions



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Performance



ORDERING INFORMATION

Order No.	Max Output Current	Typical Efficiency at Full Load	Output Voltage	Description
180993-2012	1.8A	90%	24VDC ±3%	CoreSync Gateway 60W UPOE, 1xCV, 24V

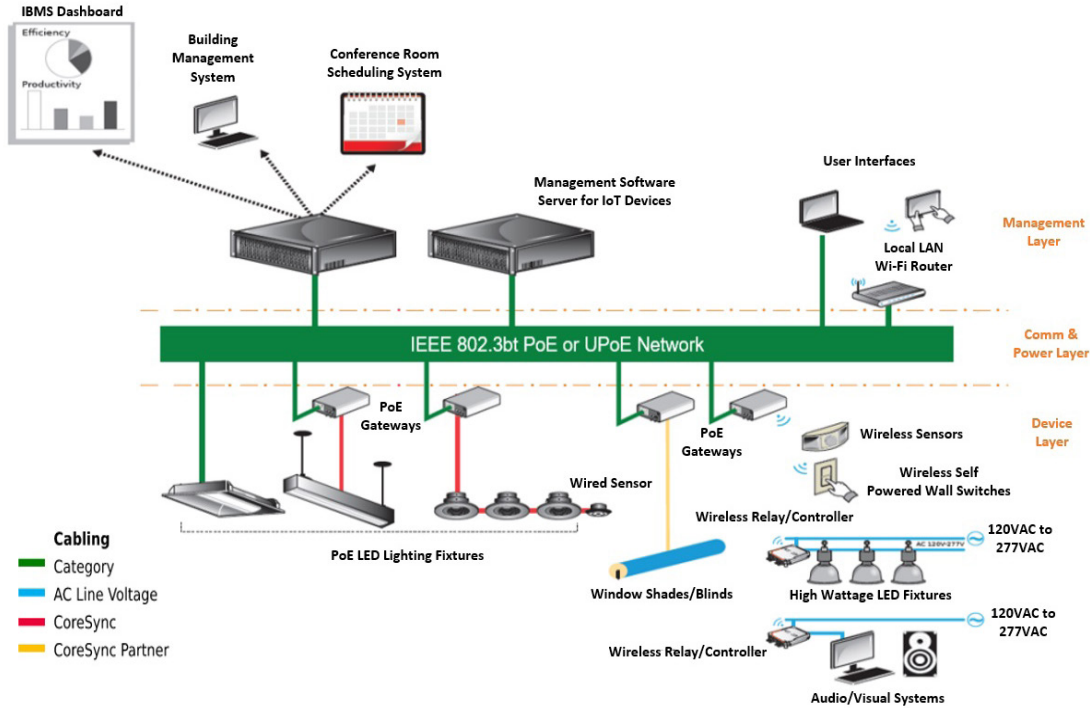
RELATED PRODUCTS

Molex Series	Description	Gauge / conductor	Start	End	Plenum rated Cable
180777, 180778	CoreSync Daisy-Chain	18/4	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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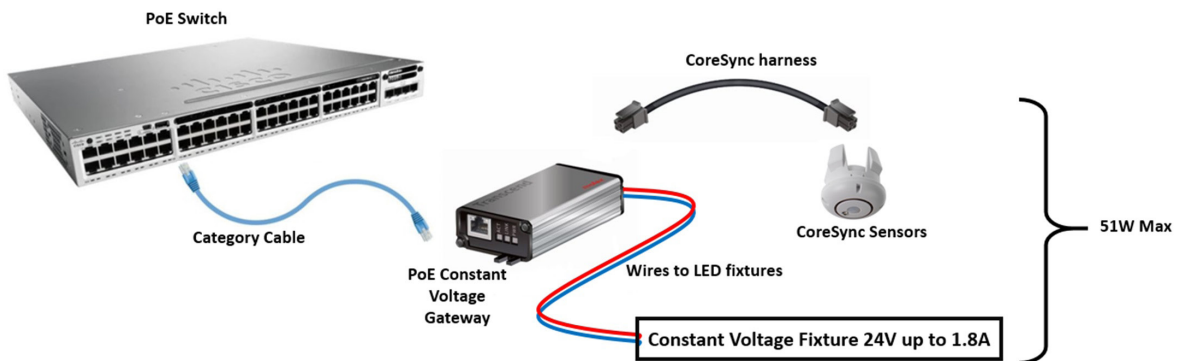
CoreSync Gateway 60W, Constant Voltage >

TYPICAL APPLICATION



DAISY-CHAINING

The CoreSync Constant Voltage Gateway 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 Constant Voltage Gateway is 51W. Of the 51W, 43.2W can power and control a constant voltage LED fixture. The difference between the 51W and the constant voltage LED fixture load can be used to power and control additional lower voltage CoreSync 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 Constant Voltage Gateway 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 UPOE standard, and considers the constant voltage 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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