

# CoreSync Harness

**CoreSync Harnesses provide seamless installation, maximum flexibility and robust connections.**

CoreSync Harnesses connect CoreSync PoE Gateways and devices to provide low voltage power distribution and data communication via our CoreSync system. Using this harness system also helps minimize the number of PoE ports by “daisy-chaining” from device to device.

CoreSync Harnesses are built around Molex’s rugged Micro-Fit 3.0 connector system and are available in a variety of lengths with Low Smoke Zero Halogen jacket.



## FEATURES AND ADVANTAGES

Micro-Fit 3.0 Connector System	Proven reliability, durability, ease of use
Available in Low Smoke Zero Halogen	Compliant with Euroclass requirements
Variety of lengths and connectors	Flexibility in design and layout
Twisted pair cable	Reduces effects of EM noise to ensure reliable data transmission
Terminal position assurance	Improves the quality of assembly to avoid back-out and retention issues

## SPECIFICATIONS

### Electrical

**Current:** 5A per circuit

**Voltage:** 250VDC

**Resistance:** 10 milliohms /ft

**Insulation resistance:** 1000 Megohm, min.

### Commercial Standards

Euroclass B2ca and Eca

UL Pending

### Mechanical

**Jacket Material:** LSZH B2ca and Eca

**Terminal Material:** Gold 0.76µm

**Wire:** 18AWG

**Mate/Unmate:** 8.0N max/ 2.4N min

**Crimp terminal retention:** 24.5N

### Environmental

**Operating Temp :** -40° to 105°C (-40 to 185°F)

**Non-Operating:** -40° to 105°C (-40 to 185°F)

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# CoreSync Harness >

## CONNECTION INTERFACES

4-Pin Receptacle



4-Pin Plug



4-Pin Plug Panel Mount



10-Pin Receptacle

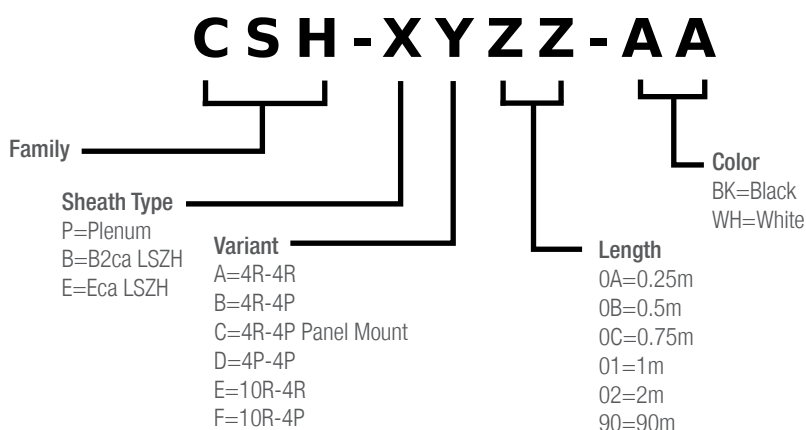


## STANDARD OFFERING

Type:	PN:	Description:
4R-4R	CSH- <b>XA0B-AA</b>	4R-4R 0.5m
	CSH- <b>XA01-AA</b>	4R-4R 1m
	CSH- <b>XA03-AA</b>	4R-4R 3m
	CSH- <b>XA05-AA</b>	4R-4R 5m
	CSH- <b>XA10-AA</b>	4R-4R 10m
	CSH- <b>XA25-AA</b>	4R-4R 25m
	CSH- <b>XA50-AA</b>	4R-4R 50m
4R-4P	CSH- <b>XB0B-AA</b>	4R-4P 0.5m
	CSH- <b>XB01-AA</b>	4R-4P 1m
	CSH- <b>XB03-AA</b>	4R-4P 3m
4R-4P Mount Plenum	CSH- <b>XC0B-AA</b>	4R-4P Panel Mount 0.5m
	CSH- <b>XC01-AA</b>	4R-4P Panel Mount 1m
	CSH- <b>XC03-AA</b>	4R-4P Panel Mount 3m
4P-4P	CSH- <b>XD0A-AA</b>	4P-4P 0.25m
10R-4R	CSH- <b>XE01-AA</b>	4P-4P 1m
	CSH- <b>XE05-AA</b>	4P-4P 5m

Substitute **X** and **AA** to specify: **X**: P = Plenum, B = B2ca, E = Eca | **AA**: BK = Black, WH = White

## CUSTOM CABLE ORDER INFORMATION

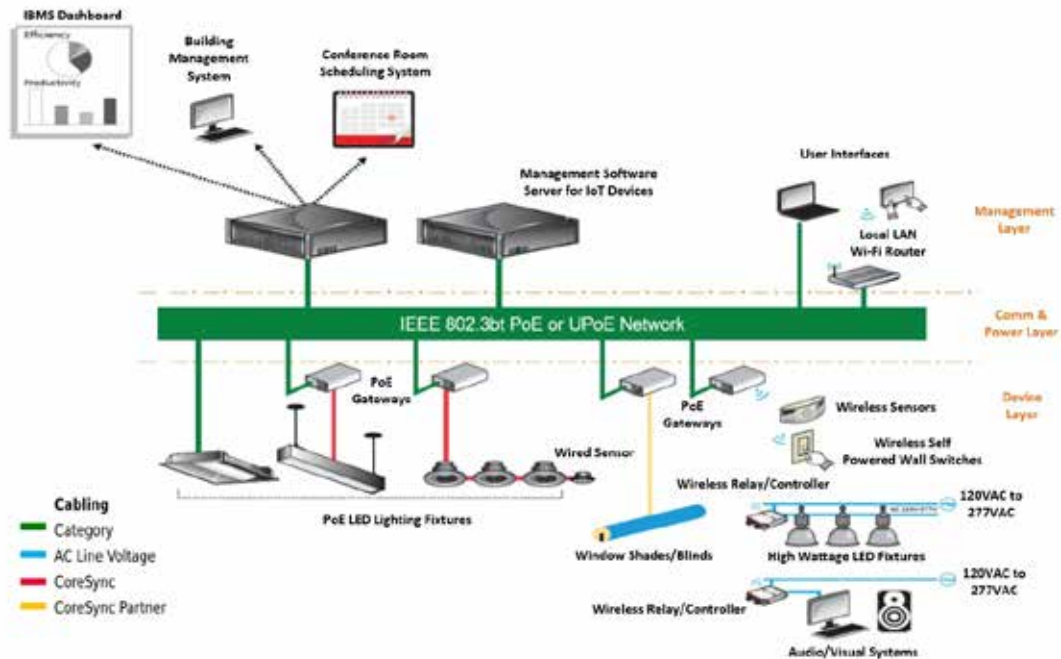


\*\*Cable configuration or length that does not appear on the standard offering list will be considered custom and will incur an additional cost. To order, follow the part number matrix to generate a custom part number.

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# CoreSync Harness >

## TYPICAL CORESYNC APPLICATION



## DAISY-CHAINING

The CoreSync PoE Gateway 90W (1807981000) 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.

For further details please refer to the user guide for this product.

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