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PROJECT INFORMATION

JOB NAME		TYPE	
ORDERING CODE			

MOLEX CORESYNC

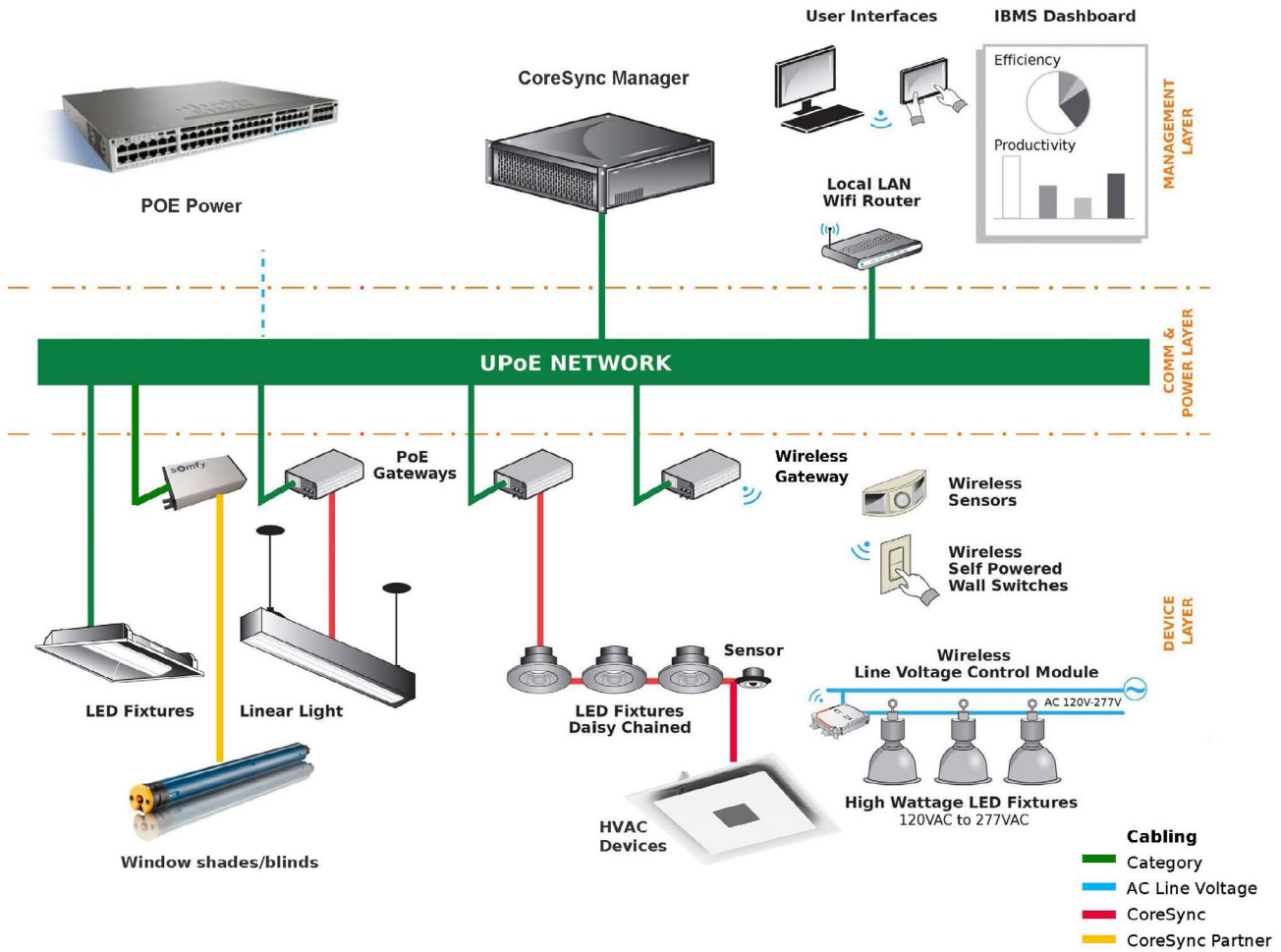## PoE Reference Sheet

molex | CoreSync

The PoE components written here are for reference for Alphabet products only and all third party components shall be provided by the customer through the OEM website.
For more information, please visit www.molexces.com.

SERIES	MCS	Molex CoreSync

POWER NODE TYPE

Choose 1 per type

180993-0001	The CoreSync PoE Gateway is a low voltage 60W power distribution and network connected module that utilizes PoE (Power Over Ethernet) technology.
180798-1000	The CoreSync PoE Gateway 2.0 is a low voltage 90W power distribution and network connected module compliant with IEEE802.3bt standard that utilizes enhanced 90W-per-port PoE technology.

CONTROL DRIVER TYPE

Choose 1 per fixture. See datasheet to choose current output type.

180996-1007	Molex CoreSync 1 channel Programmable Smart LED Driver, for driving Constant Current LED engines in a wide variety of light fixtures. Con-trolled and powered by a Molex CoreSync PoE Gateway.
180996-2007	Molex CoreSync 2 channel Programmable Smart LED Driver, for driving Constant Current LED engines.
180996-5108	Molex CoreSync 1 channel Programmable High Current Smart LED driver that can be programmed to specific power outputs, Controlled and powered by a Molex CoreSync PoE Gateway.
180996-6108	Molex CoreSync 1 channel Programmable High Current Smart LED driver that can be programmed to specific power outputs, Controlled and powered by a Bolex CoreSync PoE Gateway.

HARNESS TYPE

CoreSync 1 channel Programmable Smart LED Driver, for driving Constant Current LED engines in a wide variety of light fixtures. Controlled and powered

180887-0410	CoreSync Micro-Fit 3.0 PoE Gateway Harness, Overmolded - 1 m length.
180887-0430	CoreSync Micro-Fit 3.0 PoE Gateway Harness, Overmolded - 3 m length.
180887-0450	CoreSync Micro-Fit 3.0 PoE Gateway Harness, Overmolded - 5 m length.
180888-0410	CoreSync Micro-Fit 3.0 LED Driver Harness, Overmolded - 1 m length.
180888-0430	CoreSync Micro-Fit 3.0 LED Driver Harness, Overmolded - 3 m length.
180888-0450	CoreSync Micro-Fit 3.0 LED Driver Harness, Overmolded - 5 m length.

WIRELESS SENSORS

Order amount needed on one power line

180993-3001	The CoreSync 60W Wireless PoE Gateway enables remote network control of lights, sensors, local dimmers and zone controllers. **Required to communicate with wireless sensors**
180997-0004	CoreSync Ceiling Mounted Occupancy Sensors are wireless and self powered
180997-0005	CoreSync Wall Mounted Occupancy Sensors are wireless and self powered
180997-0006	CoreSync Ambient Light Sensors are wireless and self powered Maintenance free wireless device that regularly measures and reports the temperature and humidity in a space

WIRED SENSORS

Order amount needed on one power line

182089-2000	Low voltage sensor platform leveraging network-connected Molex CoreSync infrastructure for digital building applications.
182089-3000	Low voltage sensor platform leveraging network-connected Molex CoreSync infrastructure for digital building applications.
182090-1000	CoreSync PoE Multi-Mount Sensor C enables fully network-connected sensing in a powered PoE fixture or mounted in a ceiling aperture.
COR-ELB-S0350	CoreSync Emergency Lighting Bypass receives both a PoE input and emergency power from a Life Safety power source. During normal operation, PoE power from a Molex PoE Gateway passes through the Module, enabling routine CoreSync control of an emergency-designated fixture.

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In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.

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POE ARCHITECTURE LAYOUT

PoE Gateway on the CoreSync Architecture

MANAGEMENT LAYER

User Interfaces
IBMS Dashboard
CoreSync Manager
Local LAN Wifi Router
Efficiency
Productivity

COMM & POWER LAYER

POE Power
UPoE NETWORK

DEVICE LAYER

somfy
PoE Gateways
Wireless Gateway
Wireless Sensors
Wireless Self Powered Wall Switches

LED Fixtures
Linear Light
LED Fixtures Daisy Chained
Sensor
Wireless Line Voltage Control Module
AC 120V-277V

Window shades/blinds
HVAC Devices
High Wattage LED Fixtures
120VAC to 277VAC

Cabling
- Category
- AC Line Voltage
- CoreSync
- CoreSync Partner

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NODE POWER SUPPLY MAX FIXTURES PER NODE MATRIX (LUMEN PACKAGE FOR XICATO XTM09)

	8W @ 700MA	11W @ 500MA	16W @ 700MA	31W @ 1050MA
180993-0001 (60W)	1-6	1-4	1-3	1
180798-1000 (90W)	1-9	1-6	1-4	1-2

NOTE: The connecting of multiple fixtures on one node will control all fixtures attached to that node simultaneously.
For individual control, each fixture will need its own node per line.

NODE POWER SUPPLY MAX FIXTURES PER NODE MATRIX (LUMEN PACKAGE FOR XICATO XTM19)

	5W @ 350MA	7W @ 500MA	10W @ 700MA	16W @ 700MA	26W @ 1050MA
180993-0001 (60W)	1-10	1-7	1-5	1-3	1
180798-1000 (90W)	1-14	1-10	1-7	1-4	1-2

NOTE: The connecting of multiple fixtures on one node will control all fixtures attached to that node simultaneously.
For individual control, each fixture will need its own node per line.

NODE POWER SUPPLY MAX FIXTURES PER NODE MATRIX (WATTAGES FOR STATIC WHITE)

	9W @ 250MA	11W @ 300MA	13W @ 350MA	15W @ 400MA	20W @ 550MA	26W @ 700MA
180993-0001 (60W)	1-5	1-4	1-3	1-3	1-2	1
180798-1000 (90W)	1-8	1-6	1-5	1-4	1-3	1-2

NOTE: The connecting of multiple fixtures on one node will control all fixtures attached to that node simultaneously. For individual control, each fixture will need its own node per line.

NODE POWER SUPPLY MAX FIXTURES PER NODE MATRIX (WATTAGES FOR SUNLIKE)

	11W @ 250MA	14W @ 350MA	22W @ 500MA	38W @ 850MA
180993-0001 (60W)	1-4	1-3	1-2	1
180798-1000 (90W)	1-6	1-5	1-3	1-2

NOTE: The connecting of multiple fixtures on one node will control all fixtures attached to that node simultaneously.
For individual control, each fixture will need its own node per line.

NODE POWER SUPPLY MAX FIXTURES PER NODE MATRIX (WATTAGES FOR LUMENETIX)

	18W @ 740MA	35W @ 1400MA
180993-0001 (60W)	1-2	1
180798-1000 (90W)	1-4	1-2

NOTE: The connecting of multiple fixtures on one node will control all fixtures attached to that node simultaneously. For individual control, each fixture will need its own node per line.

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NODE POWER SUPPLY MAX FIXTURES PER NODE MATRIX (WATTAGES FOR LUMINUMS CCT TW)

	9W @ 250MA	11W @ 320MA	14W @ 400MA	21W @ 550MA
180993-0001 (60W)	1-5	1-4	1-3	1-2
180798-1000 (90W)	1-8	1-6	1-5	1-4

NOTE: The connecting of multiple fixtures on one node will control all fixtures attached to that node simultaneously.
For individual control, each fixture will need its own node per line.

NODE POWER SUPPLY MAX FIXTURES PER NODE MATRIX (WATTAGES FOR LUMINUMS WARM DIM)

	10W @ 270MA	14W @ 370MA	23W @ 600MA
180993-0001 (60W)	1-5	1-3	1-2
180798-1000 (90W)	1-7	1-5	1-3

NOTE: The connecting of multiple fixtures on one node will control all fixtures attached to that node simultaneously.
For individual control, each fixture will need its own node per line.

MAX CABLE DISTANCE WITH NODE(S) AND UPOE+ SERVER (60 WATTAGE LOAD VS CABLE TYPE*)

	6W	12W	18W	24W	30W	38W
CAT-5E - COPPER	328'	220'	145'	110'	85'	68'
CAT-6 - COPPER	328'	275'	185'	135'	110'	87'
CAT-7 - COPPER	328'	275'	185'	135'	110'	87'
CAT-5E - LOW COST CU/AL	280'	140'	90'	70'	55'	44'

NOTE: The max cable distance is determined with a max 3% wattage loss per 60W line. Any other wattage output different from the PoE+ power source will have different max cable values.
Contact factory for custom load calculation.

MAX CABLE DISTANCE WITH NODE(S) AND UPOE++ SERVER (90 WATTAGE LOAD VS CABLE TYPE*)

	6W	12W	18W	24W	30W	38W
CAT-5E - COPPER	328'	328'	290'	218"	175'	138'
CAT-6 - COPPER	328'	328'	328'	275'	220'	174'
CAT-7 - COPPER	328'	328'	328'	275'	220'	174'
CAT-5E - LOW COST CU/AL	328'	280'	187'	140'	112'	88'

NOTE: The max cable distance is determined with a max 3% wattage loss per 90W line. Any other wattage output different from the PoE++ power source will have
different max cable values. Contact factory for custom load calculation.

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PoE WIRINGS EXAMPLE

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