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SMARTENGINE

PoE Reference Sheet



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.wtec.io.

PROJECT INFORMATION					
JOB NAME		TYPE			
ORDERING CODE					

SERIES	wtc	wtec smartengine
	SG-2G-LED-GNEWxxxx	LED gateway controls and dims a connected thirdparty LED fixture. Transmits sensor data. Transfers up to 102 W to fixture (34 W per channel - HCL, tuneable white or direct indirect lighting fixtures). Connects to sensor pod.
	SG-2G-EMB-xxx	Controls and dims a connected third-party LED fixture. Transmits sensor data. Combines 2 channels up to 68 W (HCL, tunable white or direct indirect lighting fixtures. Connects to sensor pod.
	SG-2G-ELCC-KT	Smartengine Universal Gateway for Emergency Lighting Kit, Generation 2.
SMART GATEWAY	SG-2G-1RELAY	Smartengine Universal Gateway, Generation 2, single relay connection. Turns on or off any connected light fixture type.
TYPES	SG-2G-OUTAGE-KT	Smartengine Universal Gateway Outage Relay Kit, Generation 2. Enables system health monitoring when connected to smartengine universal gateway.
	SG-2G-PLC120-KT	Smartengine Plug Load Gateway Relay Kit with wiring harness and RIB relay, Generation 2, 120 Vac.
	SG-2G-RELAY-KT	Smartengine Universal Gateway Relay Kit, Generation 2. Enables control of ac devices when connected to smartengine universal gateway.
	SG-2G-WH	Smartengine Universal Gateway Wiring Harness, Generation 2.
		Connects smartengine universal gateway to dry contact.
	SSEN-2G-LS	Smartengine Sensor Pod, Generation 2, in custom color with custom cable length. Collects sensor data.
	SSEN-2G-HS	Smartengine Sensor Pod, Generation 2, in custom color with custom cable length. Collects sensor data.
	SSEN-1MP-N	Smartengine LED Sensor, Generation 3, sensor only, desk level. Collects and transmits sensor data. Optimized for desk level coverage.
SMART SENSORS	SSEN-1MP-W	Smartengine LED Sensor, Generation 3. Collects and transmits sensor data.
	SSEN-1-W-GNEW1500	Smartengine LED Sensor Generation 3, one channel 500–700 mA fixture. Collects and transmits sensor data. Controls and dims a connected third party LED fixture. Transfers up to 34 W to fixture.
	SSEN-1-W-GNEW1350	Smartengine LED Sensor Generation 3, one channel 350–499 mA fixture. Collects and transmits sensor data. Controls and dims a connected third party LED fixture. Transfers up to 34 W to fixture
POWER	3GS 250	Powers and communicates with smartgateways, sensors, and wall switches. Provides communications and control for all types of lighting (220VAC).
SOURCE EQUIPMENT	3GS 277	Powers and communicates with smartgateways, sensors, and wall switches. Provides communications and control for all types of lighting (120-277VAC).
SERVER DIRECTOR	SMARTDIRECTOR	Hosts the smartengine open application framework. Provides unified
WALL	RD-1G-W	Smartengine Dimmer Wall Switch. Dims and controls LED fixture groups in a room.
SWITCH CONTROLLER	SDIM-2-4SW	Smartengine Scene Control Wall Switch. Dims, controls, and selects pre-set scenes for LED fixture groups in a location.
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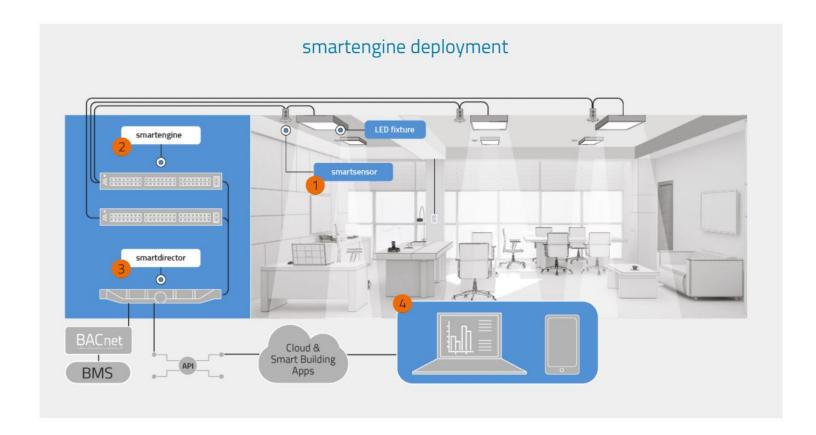
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PROJECT INFORMATION

JOB NAME TYPE

ORDERING CODE

POE ARCHITECTURE LAYOUT





PROJECT INFORMATION					
JOB NAME		TYPE			
ORDERING COD					

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

	8W	11W	16W	31W
SG-2G-LED-GNEWXXXX	1-3	1-2	1	1
SSEN-1-W-GNEW1350	1-3	1-2	1	1
SSEN-1-W-GNEW1500	1-3	1-2	1	1

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	7W	10W	16W	26W
SG-2G-LED-GNEWXXXX	1-6	1-4	1-3	1	1
SSEN-1-W-GNEW1350	1-6	1-4	1-3	1	1
SSEN-1-W-GNEW1500	1-6	1-4	1-3	1	1

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)

	5W	7W	9W	11W	13W	15W	20W	26W
SG-2G-LED-GNEWXXXX	1-6	1-4	1-3	1-2	1-2	1-2	1	1
SSEN-1-W-GNEW1350	1-6	1-4	1-3	1-2	1-2	1-2	1	1
SSEN-1-W-GNEW1500	1-6	1-4	1-3	1-2	1-2	1-2	1	1

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	14W	22W
SG-2G-LED-GNEWXXXX	1-2	1-2	1
SSEN-1-W-GNEW1350	1-2	1-2	1
SSEN-1-W-GNEW1500	1-2	1-2	1

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 CCT TW)

	7W	11W	14W	22W
SG-2G-LED-GNEWXXXX	1-4	1-2	1-2	1
SSEN-1-W-GNEW1350	1-4	1-2	1-2	1
SSEN-1-W-GNEW1500	1-4	1-2	1-2	1

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.



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

	10W	14W	23W
SG-2G-LED-GNEWXXXX	1-3	1-2	1
SSEN-1-W-GNEW1350	1-3	1-2	1
SSEN-1-W-GNEW1500	1-3	1-2	1

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 (WATTAGE LOAD VS CABLE TYPE*)

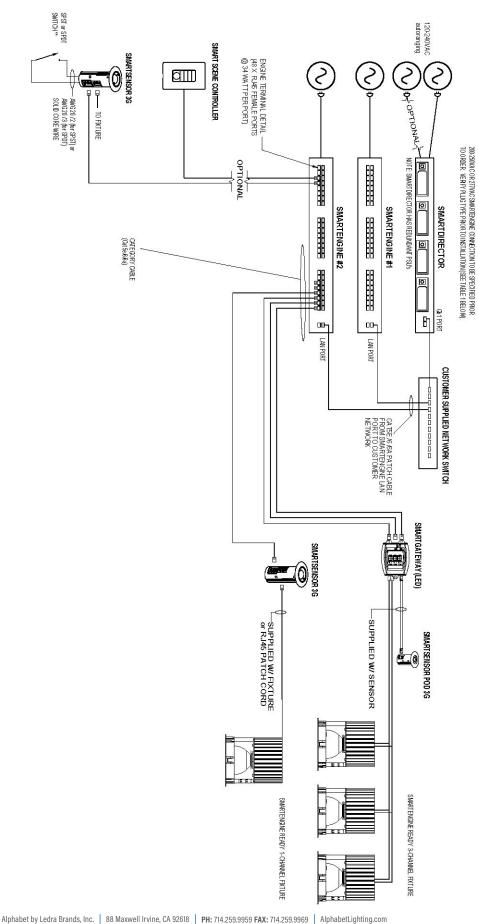
	6W	12W	18W	24W	30W
CAT-5E - COPPER	328'	220'	145'	110'	85'
CAT-6 - COPPER	328'	275'	185'	135'	110'
CAT-7 - COPPER	328'	275'	185'	135'	110'
CAT-5E - LOW COST CU/AL	280'	140'	90'	70'	55'

NOTE: The max cable distance is determined with a max 3% wattage loss per 30W 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 WIRING EXAMPLE



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