

Product Specification



PRODUCT OVERVIEW

The XS-108H lighting controller is a high-performance solution for remote constant current/voltage LED driving. The XS-108H is certified to UL 924 making emergency lighting design simple.

It provides 8 ports that can operate as IEEE 802.3bt PoE++ (90W per port), X-PoE®, or X-PoE® Max (134W per port at 57V input).

The unit uses a 48VDC to 57VDC low-voltage input and is designed to maintain efficient, reliable power delivery to connected LED fixtures.

CONFIGURATIONS

XS-108H: Single-controller configuration with 8 IEEE/X-PoE® lighting ports and uplink/downlink ports.

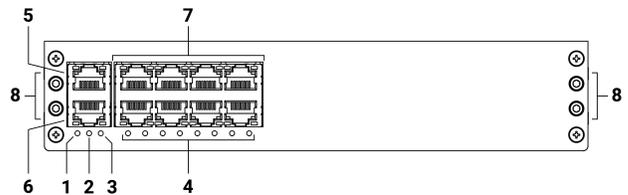
XS-108H-N: Includes 100 Mbps networking on ports 1-6

XS-108H-NC: Includes 0-10V dimming input for 3rd party control

FEATURES

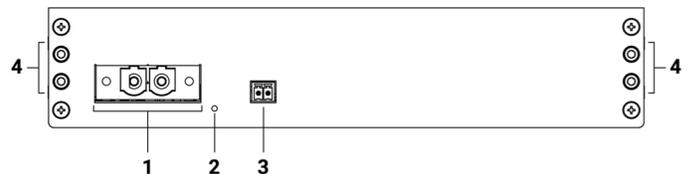
Power delivery	8 lighting RJ45 ports with IEEE 802.3bt PoE++ or 2-channel X-PoE® output
	Per-port operation: up to 90W IEEE PoE mode, X-PoE® variable output by load voltage/current, or up to 134W X-PoE® Max mode (at 57VDC input)
Flexible mounting	Half rack 1U form factor with option to join 2 units for full rack width
	Can also be wall-mounted using included brackets
Networked lighting control	Directly interfaces with Luum.io Lighting Control System via Ethernet or PoE for real-time monitoring and control
	Supports over-the-air firmware updates and remote configuration via Luum.io
	Supports 3rd-party integrations over a local secure MQTT broker when connected to a local network
Flexible system interfaces	Pin-hole operation/reset controls with multiple press-count actions
	Front and rear status LEDs for system and port diagnostics
	Dry-contact programming override input with configurable activation polarity
Certifications	UL 62368-1, UL 2108-1, UL 924, CSA C22.2#62368-1
Warranty	5-year limited warranty with uninterrupted connection of the Amatis Border Router device from a network

FRONT PANEL



1. System Reset Button
2. System Status LED
3. Programming Override Button
4. Port X-PoE® Status LEDs
5. Ethernet Uplink RJ45
6. Unused
7. IEEE/X-PoE® Lighting Ports
8. Coupling Bracket Mounting Holes

BACK PANEL



1. Power Input (48VDC to 57VDC)
2. System Power LED
3. Programming Override Input (dry contact closure)
4. Coupling Bracket Mounting Holes

TECHNICAL SPECIFICATIONS

Category	Specification	XS-108H	XS-108H-N	XS-108H-NC
GENERAL	Certifications	UL 62368-1, UL 2108-1, UL-924, CSA C22.2#62368-1		
	Warranty	5-year limited warranty with continuous cloud connection		
MECHANICAL	Dimensions	219 mm x 254.7 mm x 44 mm (8.6 in x 10 in x 1.7 in) without mounting brackets		
	Weight	1.9 kg (4.2 lb) without mounting brackets		
	Thermal Dissipation	200 BTU/h		
INTERFACES	Uplink Ports	(1) Uplink RJ45 Port		
	Downlink Ports	N/A	(1) Downlink RJ45 Port	
	Networking Ports	N/A	(6) 100 Mbps RJ45 Ports	
	3rd Party Control	N/A	(1) 0-10V dimming input for 3rd party control	
	PoE & Lighting Ports	(8) IEEE 802.3bt PoE++ / 2-channel X-PoE® Lighting RJ45 Ports		
	Power Input Port	(1) DC Power Input Port		
	Aux. Dry Contact Input Port	(1) Aux. Dry Contact Input Port		
	Operation/Reset Buttons	(2) Pin-Hole Operation/Reset Buttons		
	OVERRIDE INPUT DETAIL	Default Override Behavior	Programming override can activate on engage or disengage (based on configuration). If deactivated longer than 5 seconds, override disengages. Default behavior sets all loads to 100%, then restores prior states when disengaged.	
Activate on Close		Override engages when the input circuit is closed and disengages if input stays open for more than 5 seconds.		
Activate on Open		Override engages when the input circuit is open and disengages if input stays closed for more than 5 seconds.		
Override Level Settings		Each channel can be assigned an individual override level percentage.		
ELECTRICAL	Power Input	48VDC to 57VDC input; up to 1,000W; size power supply based on connected load		
	Power Output (Per Channel)	Current: 1115mA max; Voltage: 24VDC to 57VDC; Power: 65W max (at 57VDC)		
	Maximum Power Consumption	1,000W with all channels fully loaded at 100%		
	Power Metering	± 2.5% accuracy under typical load conditions, ± 5% below 10W		
	Power Output Note	Maximum output power depends on input voltage and the forward voltage of the connected light engine.		
	Standby Power	<6W		
	Power Efficiency	>95% efficient at typical load		
PORT MODES	IEEE PoE	Max 90W IEEE 802.3bt PoE++/port		
	X-PoE®	2 individually controllable channels per port. Max 1.12A/channel (2.24A/port). Max power is dictated by forward voltage of connected loads (typ. lighting loads 107W max/port at 48Vf, 81W max/port at 36Vf).		
	X-PoE® Max	134W/port at 57VDC (113W/port at 48VDC) input for constant power loads. Load voltage will match input voltage (adjusted for cable losses) Note: Maximum power available at the load may depend on cable length.		
ENVIRONMENT	Operating Temperature	0 C to +40 C (32 F to 104 F)		
	Storage Temperature	-20 C to +60 C (-4 F to +140 F)		
	Humidity	10% to 90% (non-condensing)		

Note: Actual performance may vary as a result of end-user environment and application.

LED INDICATOR REFERENCE

System Status LED: OFF	System processor is not receiving adequate power
System Status LED: GREEN ON	Unit is powered on and operating normally