

OVERVIEW

nLight ECLYPSE™ (nECY) interfaces nLight digital lighting networks to an IP network to support web-based analytics and visualization software, lighting network configuration tools, and building management integration to Distech Controls™ or other systems. This BTL-listed B-BC device leverages native BACnet™/IP to seamlessly integrate the lighting control network with building management systems. With its robust embedded web server and optional WiFi adapter, nLight ECLYPSE hosts edge applications like SiteView™ Energy and Space Utilization, and generates actionable, visual data with ENVYISION user interface.

FEATURES

- BACnet Testing Laboratories (BTL) listed as a BACnet Building Controller (B-BC)
- Communicates over IP Local Area Network (LAN) with SensorView, Distech ECLYPSE, XPoint Wireless bridges and nADR devices
- View and manage nLight, nLight AIR, and XPoint Wireless networks with nLight Explorer web interface
- SiteView Energy™ solution provides metering and submetering of building energy consumption and provides an informative dashboard demonstrating energy savings and environmental impact.
- Enhanced security provided by both:
 - HTTPS Server
 - U.S. Government security standard of Federal Information Processing Standard (FIPS) Publication 140-2, Level 1, Inside (Validation Certificate Pending)
- Browser-based nLight ECLYPSE and ENVYISION configuration using HTML5 technology
- Included, removable, Wi-Fi adapter can be configured as a client, access point or hot spot
- Discovers nLight, nLight AIR, and Xpoint Wireless devices
- Provides system time-clock for scheduled lighting control Profiles, including astronomical time-clock capabilities.
- Manages forwarding of global control channels and on-demand profiles across other nLight ECLYPSE controllers (Note: Max of 128 global channels per system, even with multiple nLight ECLYPSE controllers)
- Optional automatic demand response client option (nLight AIR only) provides OpenADR 2.0a VEN compatible with OpenADR protocol Demand Response Automation Servers (DRAS) to activate configurable load shed dimming levels. Requires outbound IP connection to utility DRAS.
- Remotely configurable and upgradable
- Supports 750 total nLight, nLight AIR, and XPoint Wireless devices per each nECY
- Optional NEMA Type 1 enclosure - nLight ECLYPSE unit ships factory mounted and wired to integrated power supply
- Optional touchscreen, model nGWY2 GFX - separate power supply and CAT5 cable included. Field mounting required.

Warranty

Five-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.



nLight ECLYPSE IP & Building Management Interface for nLight Networks



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ORDERING INFORMATION

NECY												Example: NECY MVOLT BAC ENC			
Series		Voltage		BACnet		AutoDR		Visualization Software		SiteView Energy Metering		Enclosure		Touchscreen Kit	
nECY nLight ECLYPSE		24 MVOLT 347	24 VAC/DC ¹ 120-277 VAC ² 347 VAC ²	[blank] BAC	Not Enabled BACnet/IP & MS/TP Enabled	[blank] ADR	Not Enabled OpenADR VEN ³	[blank] SVS	Not Enabled Envysion ⁴	[blank] SVEA	Not Enabled SiteView Energy Application ⁵	[blank] ENC	No enclosure NEMA Type 1 metal enclosure	[blank] GFXK	No touchscreen Touchscreen interface (model nGWY2 GFX, mounted separately), PS 150 power supply, CAT5 cable ⁶

ACCESSORIES	
nECY ENC	NEMA 1 Enclosure and pre-mounted 120-277VAC input, 24VDC output (Max 50W) power supply
nECYD NLTAIR G2	nLight AIR wireless adapter

Notes

1. Not available with ENC or GFXK options.
2. Requires ENC option.
3. Currently only supported for nLight AIR devices (requires nECYD NLTAIR G2). For nLight (wired) and XPoint Wireless devices, use nADR device.
4. Requires BACnet option.
5. Requires SVS & BACnet option.
6. If 347 voltage option is selected, includes PS150 347.

SPECIFICATIONS

Control Module

	Size: 4.74" H x 3.57" W x 2.31" D (12.03 cm x 9.07 cm x 5.86 cm)
	Mounting: DIN rail mounted
nLight ECLYPSE Assembly Size:	4.74" H x 14.76" W x 2.43" D (12.03 cm x 37.5 cm x 6.16 cm)
Ports:	Ethernet: (2) switched RJ-45 Ethernet ports USB Connections: 2 x USB 2.0 ports RS-485 Serial Communications: Screw terminals (Used for either BACnet MS/TP or SVEA Energy Meter Connection) Subnet: RJ-45
Real Time Clock (RTC):	Real Time Clock with rechargeable battery. Supports SNTP network time synchronization
RTC Battery:	20 hours charge time, 20 days discharge time. Up to 500 charge / discharge cycles
Enclosure:	FR/ABS UL94-V0 flammability rating
Environmental:	Operating Temperature: 32°F to 122°F (0 to 50°C) Storage Temperature: -22°F to 158°F (-30 to 70°C) Relative Humidity: 0 to 90% non-condensing Ingress Protection Rating: IP20
Security:	FIPS Publication 140-2, Level 1 Inside (Validation Certificate Pending)

nLight Network Interface Module

	Size: 4.74" H x 3.20" W x 2.31" D (12.03 cm x 8.12 cm x 5.86 cm)
	Mounting: DIN rail mounted
Ports:	3 nLight bus ports (RJ-45)
Power Supply Module (24V)	Size: 24V: 4.74" H x 2.85" W x 2.31" D (12.03 cm x 7.24 cm x 5.86 cm) Operating Voltage: 24V: 24VAC/DC; ±15%; Class 2 Output Voltage: Rated Current & Power: 24V: 18VDC regulated, 0-1.6A, 30W max

Enclosure

	Type: NEMA 1 rated surface mount screw cover
	Size: 14.25" H x 14.25" W x 4.00" D (36.20cm x 36.20cm x 10.16cm)
	Rating: UL 2043 (Plenum) Rated

COMMUNICATION

Ethernet Connection Speed:	10/100 Mbps
	Addressing: IPv4 or Hostname
BACnet Profile:	BACnet Building Controller (B-BC)
BACnet Listing:	BTL, B-BC
BACnet Interconnectivity:	BBMD forwarding capabilities BACnet/IP to BACnet MS/TP routing
BACnet Transport Layer:	MS/TP & IP (optional)
Web Server Protocol:	HTML5
Web Server Application Interface:	REST API
OpenADR VEN Profile:	2.0a

Supported BACnet MS/TP and Modbus RTU Connectivity:

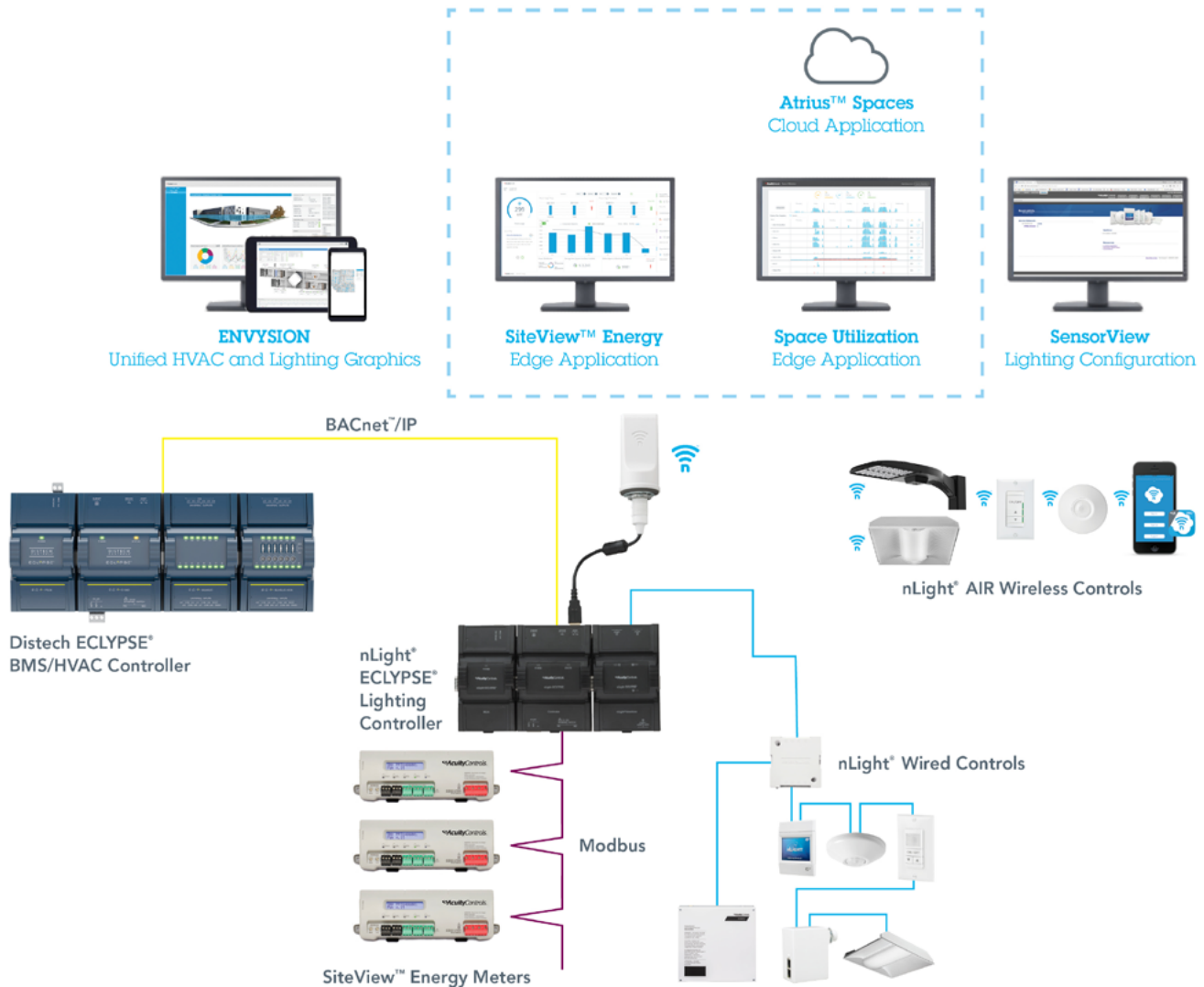
- BACnet MS/TP OR Modbus RTU 1 × RS-485 serial communications ports
- Each RS-485 port supports one communication protocol at a time
- RS-485 Wiring - 1-pair + Common/shield
- RS-485 EOL Resistor - Built-in
- RS-485 Baud Rates - 9600, 19200, 38400, or 76800 bps
- RS-485 Addressing - Controller's Web Configuration Interface

Supported Wireless Connectivity:

- Wireless Adapter - USB Port Connection
- Wi-Fi Communication Protocol - IEEE 802.11b/g/n
- Wi-Fi Network Types - Client, Access Point, Hotspot

SYSTEM ARCHITECTURE

The nLight ECLYPSE serves as the backbone for nLight, nLight AIR and XPoint Wireless digital lighting networks. The nLight ECLYPSE provides networked devices with schedule management and remote software programming via SensorView web-based software. The backbone also provides support for system-wide controls such as master override switches, automated demand response, and BACnet integration. One nLight ECLYPSE is capable of handling up to 750 total devices and up to 128 global channels for the entire network. The nLight ECLYPSE is compatible with other Distech ECLYPSE products offering a full suite of BAS capabilities and also host Edge applications such as SiteView Energy.



nLight network connects to nECY via onboard nLight ports.

nLight AIR network connects to nECY via nECYD NLTAIR G2 adapter (installed to USB port).

XPoint Wireless network connects to nECY via XPA BRG Wireless Bridge (connected via LAN/Ethernet port).