Catalog Number: | Date: | Project:

OVERVIEW

nLight ECLYPSE extends the power of nLight to deliver the next level of lighting control. This BTL listed B-BC device leverages native BACnet™/IP and WiFi to let you seamlessly integrate your lighting control system with your building management systems. With its robust embedded web server, nLight ECLYPSE hosts edge applications like SiteView™ Energy and Space Utilization, and generates actionable, visual data with ENVYSION 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 the nLight network with nLight Explorer web interface which supports ECLYPSE
- SiteView Energy™ solution allows monitoring 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 ENVYSION configuration using HTML5 technology
- Wi-Fi client, access point and hot spot capabilities
- Discovers nLight and Xpoint Wireless devices
- Provides system time-clock including astronomical time-clock capabilities.
- Stores time-based and input active profiles
- 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)
- Remotely configurable and upgradable
- Supports 750 total nLight/XPoint Wireless.
- 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.

nLight ECLYPSE

IP & Building Management Interface for nLight Networks

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.

ENABLED WITH ATRIUS™

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ORDERING INFORMATION

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

ACCESSORIES	
nECY ENC	NEMA 1 Enclosure and pre-mounted 120-277VAC input, 24VDC output (Max 50W) power supply

Notes
1. Not available with ENC or GFXK options.
2. Requires ENC option.
3. Requires BACnet option.
4. Requires SVS & BACnet option.
5. 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

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 and XPoint Wireless networked luminaires and controls. The nLight ECLYPSE provides both nLight and XPoint Wireless 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.