INTELLIGENT LOGIC CONTROLLER DIN RAIL
5-CHANNEL LOGIC CONTROLLER

PURE EDGE
Pure Smart Lighting

MADE IN AMERICA

REV 10.18.24

DESCRIPTION

The Intelligent Logic Controller is a cutting-edge networkable controller designed specifically for constant voltage 5-channel luminaires. It surpasses traditional LED ballasts, LED drivers, and DMX controllers by integrating PureEdge's TruColor™ technology. This combination ensures precise control over all five channels, delivering highly accurate Correlated Color Temperature (CCT) levels and vibrant color output. This makes the Intelligent Bridge Box the ideal choice for managing 5-channel luminaires with precision and flexibility.

This component is intended to be used in conjunction with at least one per application of GDIN-UNITY1.

FEATURES

- Flicker-Free Dimming: 0.1% dimming with no visible flicker.
- Circadian Support: Calibrated for circadian lighting.
- Automation Compatibility: Integrates easily with popular systems and enhances their functionality.
- Scene Selection: Includes static and dynamic options.
- Bi-Directional Feedback: Provides real-time updates and feedback.
- Low-End Gamma Correction: Ensures smooth dimming to black.
- Full Tunable White: 1500K to 6500K range.
- Extensive Network Control: Supports up to 254 controllers per zone.
- 64K Dimming Steps: Significantly higher than typical systems (100 or 200 steps).
- Individual Addressability: Allows precise control of connected devices.

POWER INPUT (POWER SUPPLY SOLD SEPARATELY)

- HDR-100-24N

AMBIENT OPERATING TEMPERATURE

-20° C to 45° C

LIFETIME

50,000 hours

INSTALLATION

The Intelligent Bridge Box is designed with a compact form factor, making it easy to install in various spaces such as soffits, equipment racks, junction boxes (J-Boxes), or control panels. Its small size does not compromise its functionality; instead, it enhances flexibility in placement.

APPLICATIONS

Indoor, Dry locations only.

CONNECTIVITY

- VPAD (virtual keypad) PC application
- Any third-party serial communication utility
- Lighting panels from Lutron & Vantage
- Automation systems from Crestron, Control 4, Elan Home Systems, Leviton/Bitwise, RTI, Savant and others

COMPLIANCE

UL Listed (UL File 2108). CSA (C22.2#9.0), RoHS, PCB UL-94VO certified, Rated to work with UL rated Category 2 power supplies, Made in America

Product		Wattage		Control		Voltage		Color Temperature
LCDIN	–	**96W**	–	**5C**	–	**24V**	–	**TC**
LCDIN Logic Controller DIN Rail		**96W** 96 Watts		**5C** 5-Channel		**24V** 24 VDC		**TC** TruColor™ Red, Blue, Green, Tunable White 1600K-6500K

Hue Accurate Dimming
No Color Shift Dimming

Dimmable

Full Color
COLOR.
16.7M

Tunable White
White

Circadian

Support

Gamma Correction

Safety
UL LISTED

PROJECT		FIXTURE TYPE		DATE	

INTELLIGENT LOGIC CONTROLLER DIN RAIL
5-CHANNEL LOGIC CONTROLLER

PURE | EDGE
Pure Smart Lighting

OVERVIEW

Intelligent Bridgebox Dimensions

H: 1.4"
(3.6cm)

2.39"
(6.1cm)

PORT 1   PORT 0

3.53"
(9cm)

INTELLIGENT BRIDGEBOX
DIN RAIL

LCDIN-96W-5C-24V-TC

CW	WW	B	R	G	C	+	-	GND
5	4	3	2	1			12-36VDC	

DIN RAIL POWER SUPPLY

H: 2.3"
(5.8cm)

2.75"
(7cm)
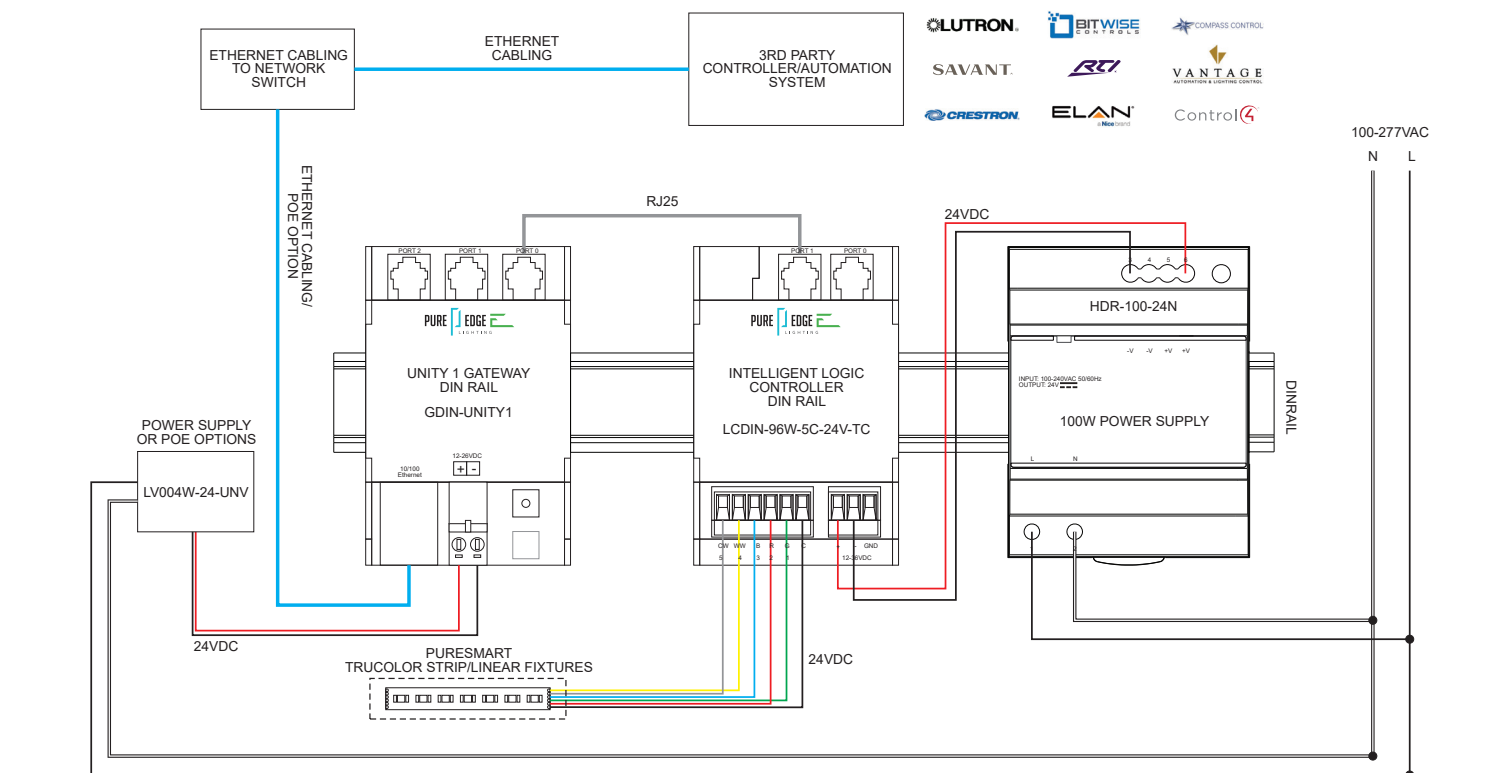
3.54"
(9cm)

INPUT: 100-240VAC 50/60Hz
OUTPUT: 24V

100W POWER SUPPLY

L   N
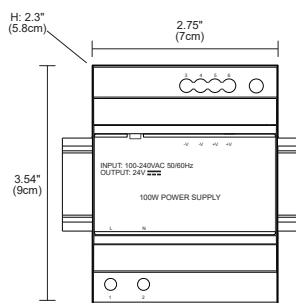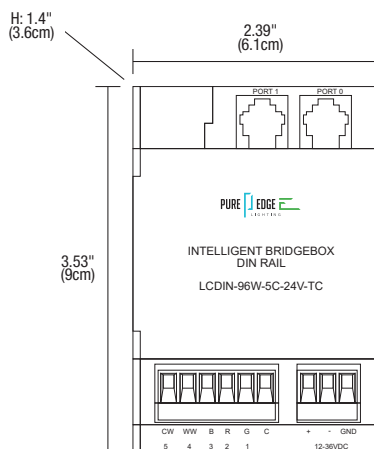
The HDR-100-24N is a compact 100W DIN Rail power supply. It's adapted to be installed on TS-35/7.5 or TS-35/15 mounting rails. Adopting the full voltage range of 85VAC-264VAC (operational 277VAC condition). The HDR-100-24N is designed with an insulated housing protecting from electrical shock hazards.

Product	Wattage	Voltage
HDR	**100**	**24N**
HDR Din Rail Power Supply	**100** 100 Watts, 4 Amp Max	**24N** 24 Volts DC

NETWORK TOPOLOGY & WIRING DIAGRAMS

Single Bridge Box Application with GDIN-UNITY1

ETHERNET CABLING TO NETWORK SWITCH

ETHERNET CABLING

3RD PARTY CONTROLLER/AUTOMATION SYSTEM

LUTRON   BITWISE CONTROLS   COMPASS CONTROL
SAVANT   RTI   VANTAGE AUTOMATION & LIGHTING CONTROL
CRESTRON   ELAN a Nice brand   Control4

100-277VAC
N   L

ETHERNET CABLING/POE OPTION

RJ25

24VDC

PORT 2   PORT 1   PORT 0

PORT 1   PORT 0

HDR-100-24N

PURE | EDGE LIGHTING

PURE | EDGE LIGHTING

UNITY 1 GATEWAY DIN RAIL

GDIN-UNITY1

INTELLIGENT LOGIC CONTROLLER DIN RAIL

LCDIN-96W-5C-24V-TC

INPUT: 100-240VAC 50/60Hz
OUTPUT: 24V

-V   -V   +V   +V

100W POWER SUPPLY

DINRAIL

10/100 Ethernet   12-26VDC
+   -

POWER SUPPLY OR POE OPTIONS

LV004W-24-UNV

CW	WW	B	R	G	C		GND
5	4	3	2	1		12-36VDC	

L   N

24VDC

24VDC

PURESMART TRUCOLOR STRIP/LINEAR FIXTURES

PROJECT		FIXTURE TYPE		DATE	

Multiple Bridge Box Application with GDIN-UNITY

Luca TruColor™ Combination

PROJECT		FIXTURE TYPE		DATE	