LUMAWISE Endurance N Enhanced Base

NEMA BASE AC/DC POWER MANAGEMENT:

JUMP START STREET LIGHTING CONTROL PROJECTS

LUMAWISE Endurance N enhanced base is a lighting control base assembly which provides AC power switching and DC power supplies necessary for complex control node solutions, creating a platform to de-risk project schedules and cost of design changes of NEMA/ANSI street and outdoor lighting control solutions.



LUMAWISE ENDURANCE N ENHANCED
BASE DE-RISKS PROJECT SCHEDULES
AND COST OF DESIGN CHANGES OF
NEMA/ANSI STREET AND OUTDOOR
LIGHTING CONTROL SOLUTIONS. THE
ENHANCED BASE TAKES OUR LIGHTING
CONTROL BASE ASSEMBLY TO THE
NEXT LEVEL OF PERFORMANCE BY
PROVIDING AC POWER SWITCHING
AND DC POWER SUPPLIES

FEATURES:

- Standard NEMA/ANSI Streetlight Interface
- Universal AC Input Range
- Isolated 24V DC Output for ballast control communications
- Isolated 5V and 3.3V DC outputs for customer circuits
- · Low voltage signal interface to LED light fixture
- Integrated over current and surge protection
- · Long life relay with zero-cross switching for AC load control
- Designed for compliance with UL 773, ANSI C136.41 and FCC Title 47 part 15

APPLICATIONS:

- Street and roadway lighting control
- Commercial & campus outdoor lighting management
- · Smart cities control networks
- Smart grid to smart cities bridging

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DC output voltages

ANSI

ANSI C136.41 compliance

UL

UL773 compliant



ENHANCED BASE

The enhanced base enables cost-effective design reuse through organized DC power and signaling interfaces. Using the enhanced base as a product platform de-risks project schedules and cost of design changes. This also lowers certifications and engineering at the same time as well as reducing supply chain expenses with new project opportunities, all to drive benefit of the bottom line.

SPECIFICATIONS:

Application: 114-133085 Product: 108-133085

MATERIALS:

• Housing: PBT

Dimming contacts: Copper alloy gold plated
 Power contacts: Copper alloy tin plated
 Gasket: Vinyl-nitrile foam
 O-Ring: Silicone rubber

RoHS compliant

ENVIRONMENTAL:

• Operating temperature: -40°C to +85°C

• Relative humidity:

- Operating: 15% to 96%

Non-condensing environment

Altitude

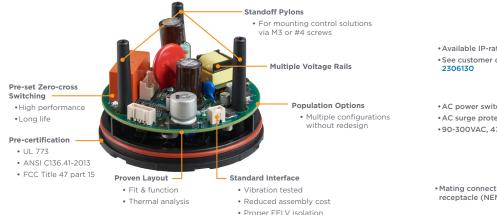
- Operating: -15M to + 2,000M - Non-Operating: -15M to + 14,000M

ELECTRICAL:

Parameter	Value/Note
Input Voltage Range	90-300 VAC for 110/120, 230/240 and 277 VAC nominal sources
Input Frequency	47-63 Hz for 50/60 Hz nominal sources
Maximum AC current	5A based upon the relay ratings
	DC Power Supplies
Dimming	24 VDC at 50 mA maximum
Communications	5 VDC at 1000 mA maximum
Auxiliary	3.3 VDC at 500 mA maximum
Surge Protection	ANSI C62.41 6 kV, 3 kA combination wave surge protection
Power Consumption	<1W @ 120VAC, < 2W @ 277 VAC
Fail Mode*	On or Off

^{*}value depends on part number

Product Features

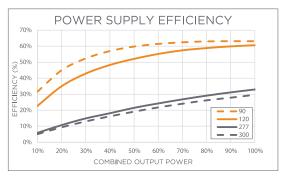




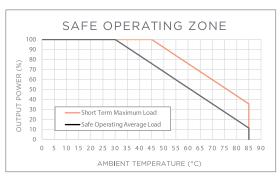


ENHANCED BASE

Efficiency



Temperature Derating



	Typical		
Output Specs	24V	5V	3.3V
Output Power	1.2 W	5 W	1.65 W
Line Regulation	<10% <5%		<5%
Load Regulation - 120V, 30C, 10% to 100%	2.5% 5%		5%
Load Regulation - 277V, 30C, 10% to 100%	2.5% 5%		5%
Temp Regulation - 120V	1.5%		
Temp Regulation - 277V	1.5%		
Transient Response - 120V, 30C	<1.5 V <0.5 V		.5 V
Transient Response - 277V, 30C	<1.5 V <0.5 V		.5 V
Ripple - 120V, 30C	300 mv		
Ripple - 277V, 30C	300 mv		
Hold Up Time - 120V	20 ms		
Hold Up Time - 277V	250 ms		
Start Up Time	20 ms		

Input Specs	Typical
Source Voltage	90 to 300 VAC
Source Frequency	50hz for x-2314786-x 60hz for 2314786-x
Inrush Current - 120V	6 A
Inrush Current - 277V	13 A
Leakage Current	< 2 mA
Surge Protection	ANSI C62.41 6kV, 3 kA Combination Wave
Standby Power Consumption - 120V	0.7 W
Standby Power Consumption - 277V	1.0 W
Efficiency	60% (120V, 100% load)

EMC and Immunity	
Conducted Emissions	FCC Title 47, Part 15, Class B
Radiated Emissions	FCC Title 47, Part 15, Class B
Harmonic Current	EN61000-3-2 Class A
Electrostatic Discharge (ESD)	JS-001, IEC 61000-4-2

Environmental	
Storage Temperature	-40°C to +105°C
Operating Temperature	-40°C to +85°C (See 114-133085)
Relative Humidity	15% - 96%, Non-condensing
Altitude	-15M to 2000M

Switched Load	
Max AC Current	8A Resistive 5A Electronic Ballast @ 120V 3A Electronic Ballast @ 277V
Endurance	C136.10 Long Life
Zero-Cross Switching	Yes (See 114-133085)

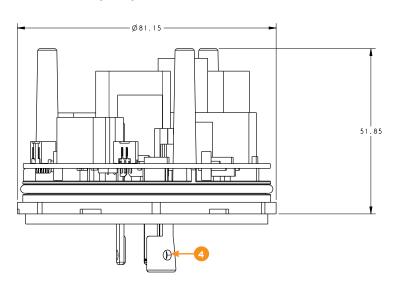


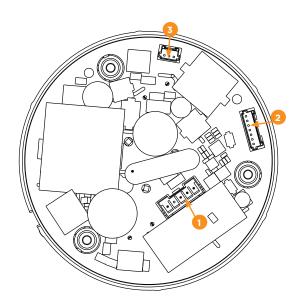
ENHANCED BASE

Product Selection Information

Part Number	Description	Description Frequency (Hz)	
2314786-1	LUMAWISE Endurance N Enhanced Base	ance N Enhanced Base 60	
2314786-2	LUMAWISE Endurance N Enhanced Base	I Enhanced Base 60	
1-2314786-1	LUMAWISE Endurance N Enhanced Base	50	ON
1-2314786-2	LUMAWISE Endurance N Enhanced Base 50		OFF

Dimensions (mm)





Compatible Products

Item	Enhanced Base Interface	Description	Part Number
1	Energy Metering Connection	EMC Cable Assembly	2318044-1
2	Luminaire Control Connection	LCC Cable Assembly, 7 position	2318043-1
3	Management Power Connection	MPC Cable Assembly, 3 position	2318043-2
4	ANSI C136.41-2013 Interface	LUMAWISE Dimming Receptacle	2213362
			2213627

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1-1773941-4 AK 09/20 Revised

