



CEL-016PAU

Commercial Series (0-10V Dimming)

16W LED Driver Family
0-10V, 1% Dimming

Nominal Input Voltage (V _{in})	Family Output Power Range (W)	Output Voltage Range (V _{out})	Output Current Range (A)	Efficiency (%)	UL Max Case Temp. T _c (°C)	THD (%)	Power Factor	Dimming Method	Dimming Range (%)
120~277V _{ac}	16W	26~42V _{dc}	0.21~0.40A	up to 84% (typical)	90°C	< 20%	> 0.9	0-10V (Isolated Sink/Source)	1-100% (of I _{out})



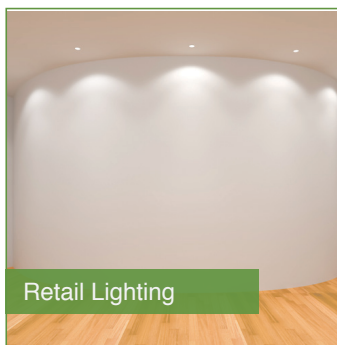
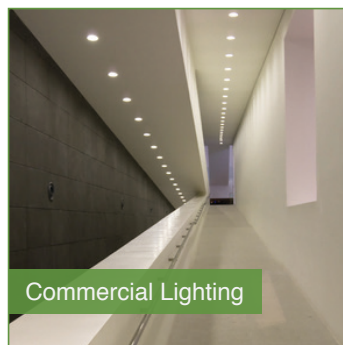
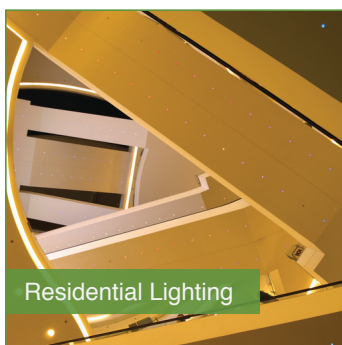
Variants available:
-10W Puck (with Triac / ELV dimming)
-20W Puck (with 0-10V dimming)

CEL-015PAU
CEL-020PAU

- ✔ Ideal for Downlight & Recessed Lighting
- ✔ Universal AC input (108~305V_{ac})
- ✔ 1% Deep Dimming (0-10V) (optional higher levels)
- ✔ Enables DLC compliant fixtures
- ✔ Ideal for IC rated luminaires without driver cover
- ✔ Turn on/off in less than 750 milliseconds
- ✔ Class P UL Driver
- ✔ Built-in Commercial grade surge protection
- ✔ Class A Noise Rating
- ✔ Integrated over voltage & open load, over current, short circuit & temperature protection
- ✔ Turn on & Full power operation between -30°C to +55°C ambient ^{1,9} (T_{case} rated for 90°C)
- ✔ XenerQi Industry Leading 5 Year True Warranty™²
- ✔ Class 2 Power Supply
- ✔ Complies to FCC CFR Title 47 Part 15

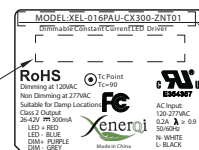
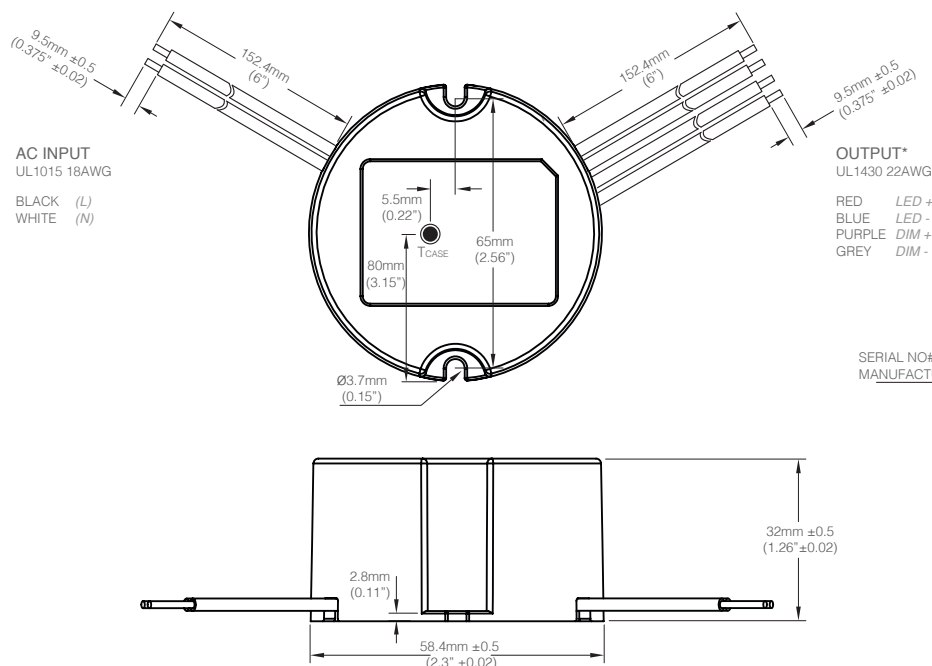
See product specific data pages for details.

Typical Applications



Mechanical Drawings-Dimensions

(not to scale)



EXAMPLE MODEL NO#

SERIAL NO# & MANUFACTURE DATE

Case		Wire Dimensions	
Material	Plastic (UL 5VA)	Wire Gauge	18AWG (Input) / 22AWG (Output)
Unit Weight	120g (±10)	Wire Length	152.4mm (±3mm) / 6" (±0.12")
Dimensions	58.4mm x 58.4mm x 32mm / 2.3" x 2.3" x 1.26"	Strip Length	9.5mm (±0.5mm) / 0.375" (±0.02")
Recommended Fixings 2x M3*10mm / 5-40*3/8" Fastners			

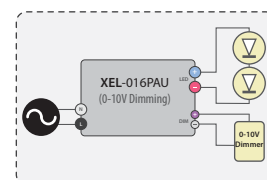
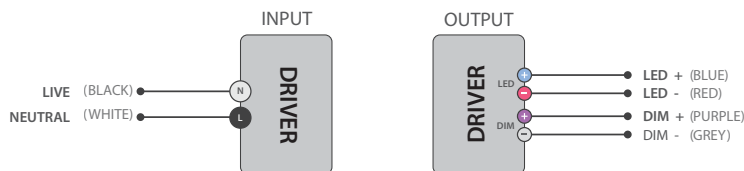
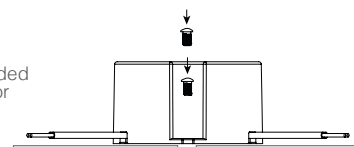
Installation Guide

Mounting & Wiring Diagrams



WARNING: TO REDUCE THE RISK OF FAILURE / INJURY:
 DRIVER MUST BE INSTALLED IN LUMINAIRE & SYSTEM GROUNDED IN ACCORDANCE WITH THE LOCAL CODES.
 FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY AND/ OR DAMAGE TO THE SYSTEM.

Fix using 2 recommended fastners (see above) for secure mounting.



Wires	Colors	Type	Wires	Colors	Type
Input	White (Neutral)	UL1015 AWG 18	Dimming	Purple (Dim +)	UL1430 AWG 22
	Black (Line)	UL1015 AWG 18		Grey (Dim -)	UL1430 AWG 22
Output	Red (Positive)	UL1430 AWG 22			
	Blue (Negative)	UL1430 AWG 22			

Specification Data

Output	DC Voltage Range	26 ~ 42 Vdc (full power 20 ~ 42Vdc)
	Optimized Vf Range ⁶	36 ~ 38 Vdc
	Rated Current Range	0.210 ~ 0.400 A (not dimmed - see specific model pages)
	Rated Power Range	8.8 ~ 16.8W
	Line Regulation ³	±5%
	Load Regulation ³	±5%
	Turn On/Off Time	750ms (at full load), < 1000ms (at 10% dimming level)
Input	Voltage Range ⁴	120 ~ 277Vac Nominal (108 ~ 305Vac Operational)
	Frequency Range	47 ~ 63 Hz
	Power Factor	PFC > 0.9 at ≥ 75% of full power ⁴
	THD	THD < 20% at ≥ 75% of full power ⁴
	Typical Inrush Current	< 8.0A (per ANSI test method. Compliant with NEMA410-2015)
Dimming	Modes	DC Dimming control: 0-10Vdc (1%) Sink Source (> 1% available on request)
	0-10V Source Current	260µA (Isolated)
	Compatibility	IEC Compliant
Protection	Short Circuit	Auto-restart (after fault removed)
	Over Voltage & Open Load	Vout < 60V (Class-2)
	Over Current	Inherently limited over operational range
	Over Temperature	Current foldback at hotspot greater than 90°C (Programmable to customer preference) ⁵
Environment	Working Temperature	-30°C ~ 55°C ambient ^{1,9} (T _{case} rated for 90°C)
	Working Humidity	20% ~ 90% RH non-condensing
	UL Rating	Dry / Damp location use
	Storage Temperature	-40°C ~ 85°C ambient
	Storage Humidity	10% ~ 90% RH non-condensing
	Impact Resistance	1 g/s
	Vibration	3 ~ 50Hz 1g (for 30 minutes)
	Operating Life	50,000 Hours at Full Load & Maximum Hotspot
Safety & EMC	Safety Standards	UL8750, Class 2 (UL1310), Class P rated
	Noise Rating	Class A (Less than 24dB measured at 1 meter) ^{3,7}
	EMI Conduction & Radiation	Compliant with FCC CFR Title 47 Part 15 Class A at 120/277Vac & Class B at 120V
	EMC Susceptibility	EN61000-4-6, EN61000-4-2, EN61000-4-12
	Transient Immunity	2kV/1kA Combination, 2.5kV Ringwave Modes: L-N

¹ Ambient is estimated. Actual temperatures determined by trigger point temperature at driver hotspot. Assumed case is mounted on flat surface.

² True Warranty refers to operation at full load and max hotspot temperature. For specific warranty details refer to XenerQi published warranty document.

³ Guaranteed only within nominal input range.

⁴ Critical parameters guaranteed over nominal input range.

⁵ Shutdown requires power cycle to recover.

⁶ Units optimized for steady state forward voltage as per "Optimized Vf Range" value in specification data, and for specific LED loads.

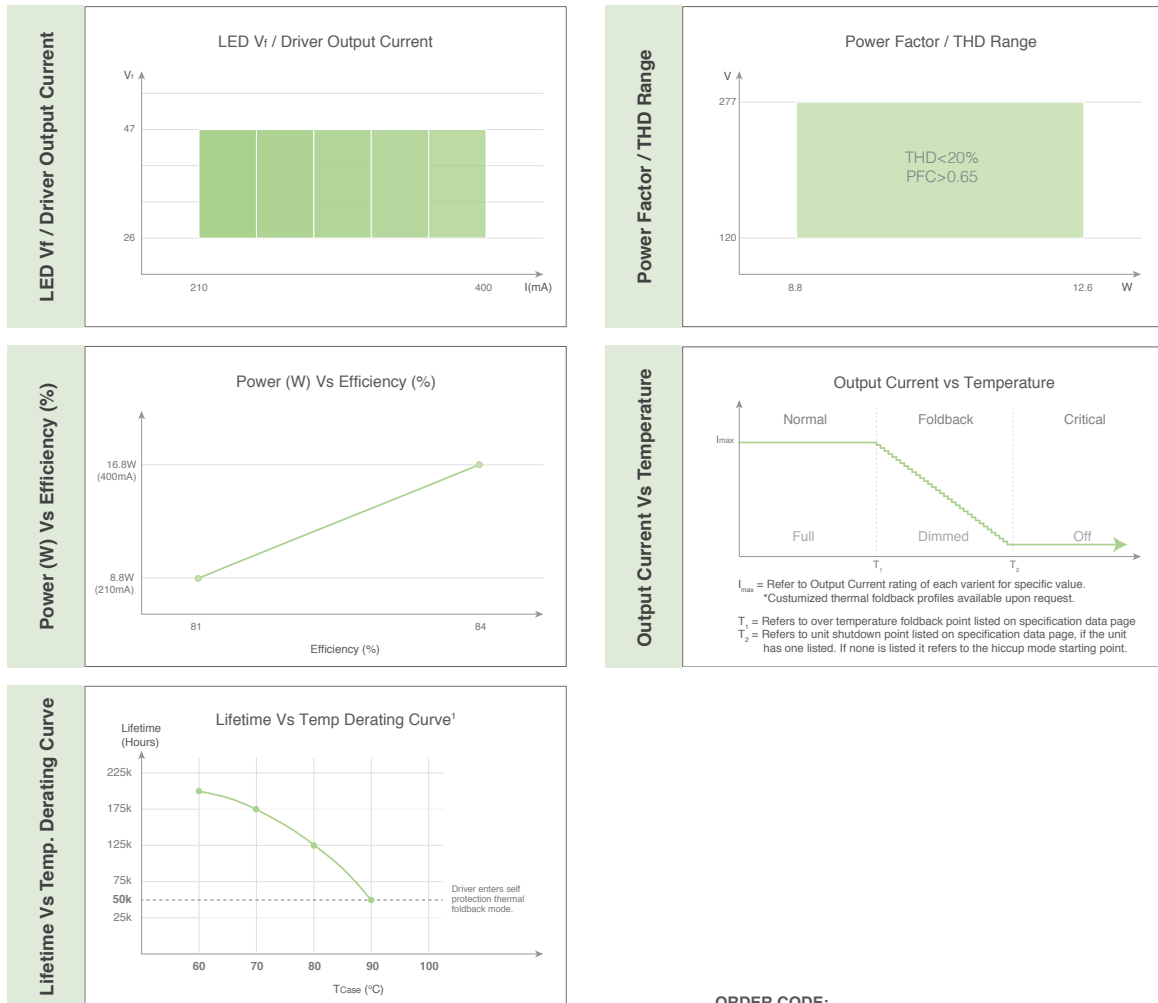
List of LED loads available upon request.

⁷ Tested under two conditions: with & without dimmer connected.

⁸ Value listed is family maximum or minimum best case value as appropriate & can vary depending on part number.

⁹ XEL-016PAU-CX350G-ZNT01P / XEL-016PAU-CX400G-ZNT01P have MAX working temperature of 50°C ambient.

Operation Performance-Family



ORDER CODE:
XEL-016PAU-CXXXXG-ZNT01P

XXXX: Current Rating
 (See Available Model Table)

Variants available:
 -14W Puck (with 0-10V dimming)
 -20W Puck (with 0-10V dimming)

XEL-015PAU
 XEL-020PAU

Available Models

	Part Number	Output Current (mA)	Output Voltage Range (V)	Maximum Efficiency ⁶	Max Output (W)
Fixed Output Current Variants	XEL-016PAU-CX210G-ZNT01P	210	26 ~ 42	81%	8.8W
	XEL-016PAU-CX275G-ZNT01P	275	26 ~ 42	83%	11.6W
	XEL-016PAU-CX300G-ZNT01P	300	26 ~ 42	84%	12.6W
	XEL-016PAU-CX350G-ZNT01P ⁹	350	26 ~ 42	84%	14.7W
	XEL-016PAU-CX400G-ZNT01P ⁹	400	26 ~ 42	84%	16.8W
⁹ XEL-016PAU-CX350G-ZNT01P / XEL-016PAU-CX400G-ZNT01P have MAX working temperature of 50°C ambient.					
Customized Variants available upon request.					

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