

#### **FEATURES:**

- Universal Input: 90~264 Vac
- High Efficiency: Up to 86% •
- Active Power Factor Correction
- Short Circuit / Open Circuit Protection
- Meet UL, CE Safety Requirement
- Long Life, High reliability .
  - Ultra-low ripple without flickering
- 3-year limited warranty •

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Models	
Single output	

Models Single output					CE 🦉
Model	Max Output Power (W)	Output Voltage Range (V)	Output Current (mA)	Input Voltage (VAC/Hz)	Efficiency (%)
AMEPR60N-42140Z	58.8	24-42	1400	90-264/47-63	86

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity <75%, nominal input voltage and at rated output load unless otherwise specified.

### **Input Specifications**

Parameters	Conditions	Typical	Maximum	Units
Input Current	90 VAC, full load		0.86	Arms
Inrush current <2ms	115 VAC, cold start		40	А
Infush current <2ms	230 VAC, cold start	60		A
Leakage current			0.75	mA
Input dissipation	No Load		1.5	W
Input dissipation	Output Short		5.0	W
Power Factor	115 VAC, full load		0.98	
Power Factor	230 VAC, full load 0.95			
Input Fuse		2A/250V		
Chart up Time	115 VAC, full load		1.5	Sec.
Start-up Time	230 VAC, full load		1.0	Sec.

### **Output Specifications**

Parameters	Conditions	Typical	Maximum	Units
Current accuracy		±5		%
Line regulation	LL to HL	±3		%
Load regulation	Full Output Voltage Range	±5		%
Ripple & Noise			200	mV p-p
Output Current Ripple	Full load		70	mA
Current Overshoot	LL to HL, full load at cold start, % of rated output current		15	%
Hold-up time (min)			0.5	ms
Minimum Load Voltage	See M	lodels Table Above		

#### **Isolation Specifications**

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage			3750	VAC
Isolation Resistance	500Vdc	>100		MΩ
Isolation Capacitance		100		pF

### **General Specifications**

Parameters	Conditions	Typical	Maximum	Units
Switching frequency			150	KHz
Over voltage protection	50 V			
Short circuit protection	Continuous, Hiccup Mode			
Short circuit restart	Auto Recovery			
Open circuit protection	Continuous, Hiccup Mode			



# **Series AMEPR60N-Z**

## up to 1400mA | AC-DC LED driver

Operating temperature	Without Derating -40 to +50				
Maximum case temperature		90		°C	
Storage temperature		-40 to +85		°C	
Temperature coefficient		0.03			
Cooling	Free Air Convection				
Humidity	90				
Case material	Plastic				
IP Rating	IP54				
Weight	260				
Dimensions (L X W X H)	6.30 x 1.73 x 1.61 inches 160.00 x 44.00 x 41.00 mm				
MTBF	>300,000 hrs (MIL-HDBK-217F at +25°C)				

# Safety Specifications

Parameters		
	Electromagnetic Interference	EN55015 / FCC Part 15, Class B
	Harmonic Current Emissions	EN61000-3-2, Class B
	Voltage fluctuations and flicker	EN61000-3-3
	Electrostatic Discharge Immunity	EN61000-4-2, 8kV Air, 4kV Contact, Level 3, Criteria A
	RF, Electromagnetic Field Immunity	EN61000-4-3, Test-RS Level 3, Criteria A
Standards	Electrical Fast Transient / Burst Immunity	EN61000-4-4, Burst EFT Level 3, Criteria A
	Surge Immunity	EN61000-4-5, Line to Neutral 4kV, Neutral to FG 6kV
	RF, Conducted Disturbance Immunity	EN61000-4-6. Test-CS Level 3, Criteria A
	Power frequency Magnetic Field Immunity	EN61000-4-8, Test 3A/m, Criteria A
	Voltage dips, Short Interruptions Immunity	EN61000-4-11, Criteria B
	Electromagnetic Immunity Requirements Applies	EN61547
	to Lighting Equipment	

### **Pin Definition**

Pin	Specification / Termination	
AC-N	Blue Color, Wire Gauge #18	
AC-L	Brown Color, Wire Gauge #18	
LED+	The central pin of DC5521 Plug, Connected to the internal red wire	
LED-	The external Cylinder pin of DC5521 Plug, Connected to internal black wire	

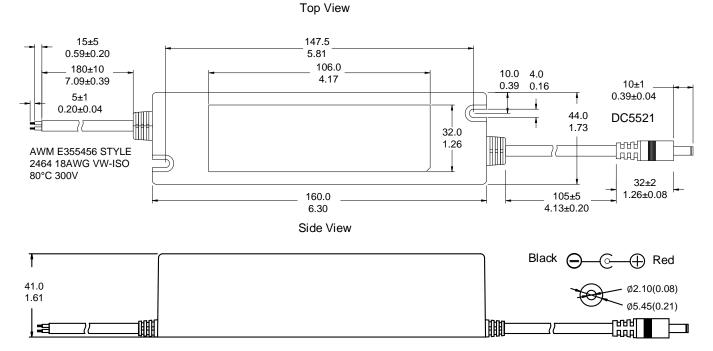
# **Block diagram**





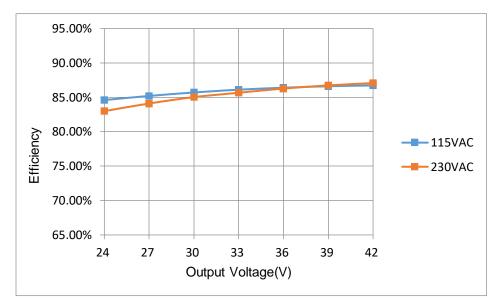
Series AMEPR60N-Z up to 1400mA | AC-DC LED driver

## Dimensions



## Efficiency Vs. Input Voltage & Output Load Voltage

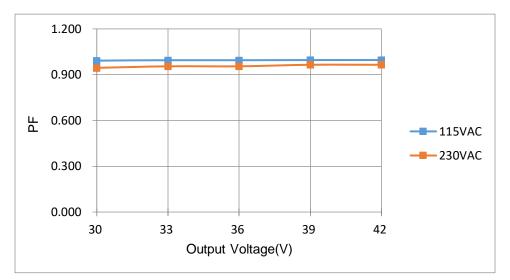
AMEPR60N-42140Z





## PF vs. Input Voltage & Output Load Voltage

AMEPR60N-42140Z



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