

# **TECHNICAL SPECIFICATION**

## MODEL NO.: APMS-150CAJ-700 DOCUMENT NO.:\_

CUSTOMER NO .:\_

DATA.:

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## **APMS-150CAJ-700 Series**

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150W output with current adjustable function



1. Constant Power Mode

- 2. Built-in Active PFC Function, High efficiency up to 92%
- 3. Protection: Over load/overvoltage/over temperature Short Circuit Protection
- 4. Output current support adjustable
- 5. Aluminum housing design with functional Ground
- 6. IP67 full sealed for indoor and outdoor installations
- 7. Low ripple, 100% flicker-free design
- 8.5 Years warranty

## **TECHNICAL PARAMETERS**

Model		APMS-150CAJ-700	
OUTPUT	Output voltage range	107-214VDC	
	Output Current range	700mA-1050mA	
	Output Power	150W	
	Open Circuit Voltage(Max)	230VDC	
	Efficiency	≥92%	
	Total Output Current Ripple (pk-pk)	5% lo Max	
	Current Tolerance	±5.0%	
	Startup overshoot current	10% Io Max, at 100% Load condition	
	Line Regulation	±1%, @100% load	
	Load Regulation	±3%	
	Turn-on delay time	<2\$	
	Efficiency	90%/120VAC, 92%/220VAC, 92.5%/277VAC, Measured at 100% load and steady-state temperature in 25 C ambient; (Efficiency will be about 2.0% lower if measured immediately after startup.)	

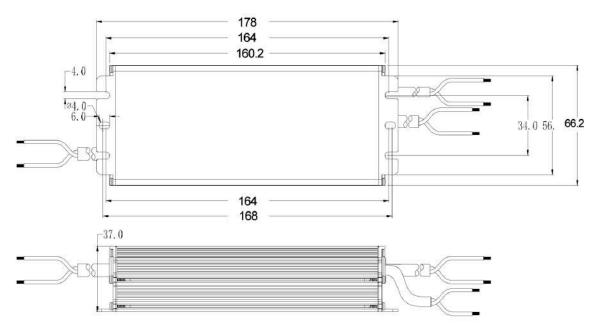
INPUT	Rated Input voltage	100-277VAC	
	Input voltage range	90-305VAC	
	Input Frequency	47-63(Typical 50/60)HZ	
	Input Current Max	2.0A Max	
	Inrush Current	3.49 A2s, At 220Vac input, 25C° cold start, duration=244 $\mu$ s, 10%lpk-10%lpk. See Inrush Current Waveform for the details.	
	Power Factor	≥0.95 /230VAC; ≥0.92/277VAC @ full load	
	THD	≤10% At 220-240Vac, 50-60Hz, 75%-100%load (112.5-150W)	
	Leakage Current	<0.75mA/277VAC	
	Short Circuit	Auto Recovery. No damage will occur when any output is short circuited. The output shall return to normal when the fault condition is removed.	
	Over Load	Hiccup mode, auto-recovery after fault condition is removed	
PROTECTI ON	Over Temperature	Decreases output current, auto-recovery after temperature goes down	
	Over Voltage	Shut-down output voltage, re-power on to recover	
	Open circuit	yes	
	Working Temperature	-40C°~+85C°(Typical25C°), refer to derating curve	
	Max Case Temperature	90C° Max,Ta:60C°	
	Working Humidity	20-95% RH NO-condensing	
	Storage Temp/Humidity	-40C°~+80C°, 10-90% RH	
ENVIRON MENT	Attitude	0 ~ 5000 M, Altitude Over 2000 meters, 1.5% derating for every 100 meters increase	
	Temperature Coefficient	0.03%/C° (0-60C° )	
	Vibration	10-500Hz, 5G 12min./1cycle, period for 72 min, each along X.Y. Z axes	
	MTBF	200Khours, MIL-HDBK-217F (25C°)	
others	Lifetime	50Khours(230Vac&100% load, 75°C case temperature, refer to lifetime curve for details )	
	Dimension	178(L)*66.2(W)*37(H) mm	
	Packing	0.65Kg;20pcs/ 14Kg/0.025CBM	

	Safety Standards	UL8750, IEC/EN61347-1,EN61347-2-13,EN62368, GB19510.1,GB19510.14, IP67 Approved		
SAFETY& EMC	Withstand Voltage	I/P-O/P:3KVAC, I/P-FG:1.5KVAC, O/P-FG: 500VAC		
	Isolation Resistance	I/P-O/P,I/P-FG,O/P-FG:100M Ohms/500VDC/25C°/70RH		
	Storage Temp/Humidity	-40C°~+80C°, 10-90% RH		
	EMI			
	Conducted	EN55015(CISPR15), GB17743		
	Radiated	EN55015(CISPR15), GB17743		
	Harmonic Current	EN61000-3-2 , Class C @load≥50%		
	EMS			
	ESD	EN61000-4-2, 8KV air ; Level 2, 4KV contact		
	Radiated	EN61000-4-3		
	EFT/Burst	EN61000-4-4		
	Surge	EN61000-4-5, 4KV/Line-Line 6KV/Line-Earth		
	Conducted	EN61000-4-6		
	EN61547, Electromagnetic Immunity Requirements applies to lighting Equipment			

Note: (1) This LED driver meets the EMI specifications above, but EMI performance of a luminaire that contains it depends also on the other devices connected to the driver and on the fixture itself.

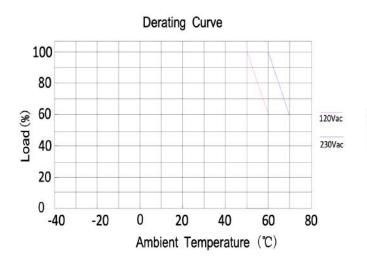
## **Mechanical Mounting**

DIMENSION	178(L)*66.2 (W)*37(H) mm		
Input Cable	AC/N(Blue) AC/L(Brown) FG(Green/Yellow)	VDE 17AWGx3C & 3x1.0mm <sup>2</sup>	250±30mm Length
Output Cable	V+(RED)/Brown, V-(BLACK)/Blue	VDE 17AWGx2C & 2x1.0mm <sup>2</sup>	250±30mm Length

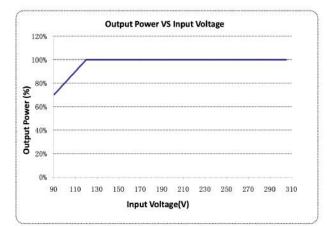


## **Characteristics & Derating**

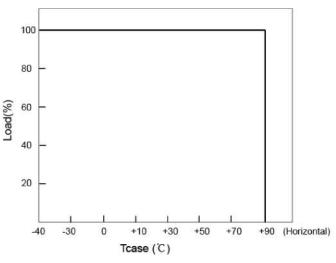
#### **OUTPUT LOAD vs TEMPERATURE**



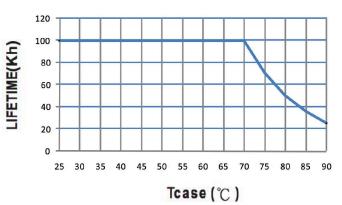
## STATIC CHARACTERISTIC

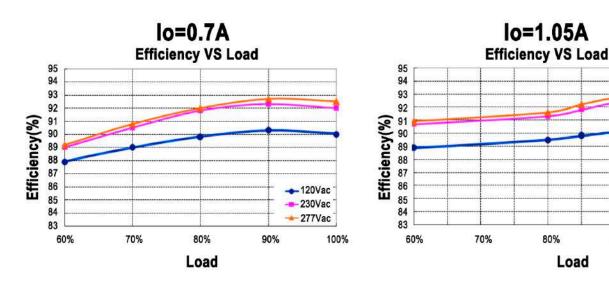


**OUTPUT LOAD vs Tcase** 

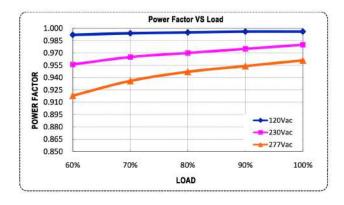


LIFE TIME

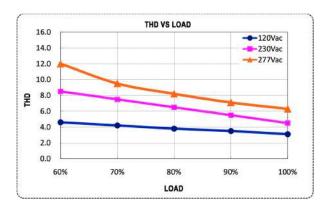




POWER FACTOR VS LOAD



TOTAL HARMONIC DISTORTION



-120Vac

230Vac

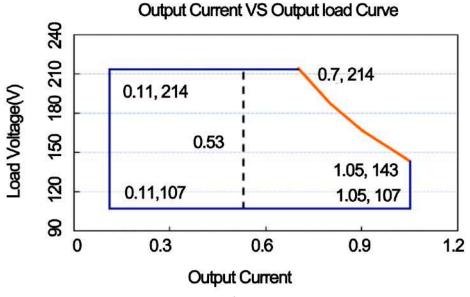
277Vac

100%

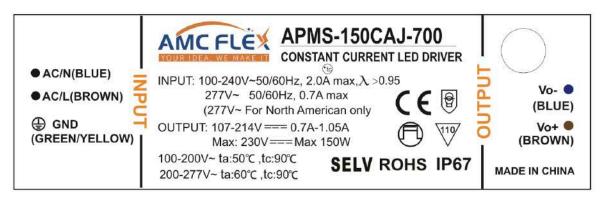
90%

RoHS Compliance Our products comply with reference to RoHS Directive (EU) 2015/863 amending 2011/65/EU, calling for the elimination of lead and other hazardous substances from electronic products

## **Operation Area**



### **Product Labels**



## **Installation Manuel & Caution**

(1).Before commencing any installation or maintenance work, please disconnect the power supply from the utility. Ensure that it cannot be re-connected inadvertently.

(2). Keep proper ventilation around the unit and do not put any object on it. 15-20cm clearance must be kept when the adjacent device is a heat source

(3).Operating under high ambient temperature may cause the internal component temperature and will require a de-rating in output load

(4).Install in wet condition need use waterproof connectors, make sure there is no space between the unit and lighting fixtures.

(5). Output current and output wattage must not exceed the rated values on the specifications (6).Wiring

Connect the ACL wire (Brown) of the LED power supply to Live (black or brown).

Connect the ACN wire (Blue) of the LED power supply to Neutral (white or blue)

(7). Risk of electrical shock and energy hazard. All failure should be examined by a qualified technician.

Please do not remove the case of the power supply by yourself!

(8). Can't be installed under water or buried in soil directly

(9). Please do not install LED power supplies in places with high ambient temperature or close to fire source (10). The FG ( $\bigoplus$ ) must be well connected to PE(protective earth)

(11). If the external flexible cable or cord of this switching power supply is damaged, it shall be exclusively replaced by the manufacturer or similar qualified person in order to avoid a hazard.