

LED Driver

LP1020-xx Series Switch-Mode LED Driver	
Total Power	20 Watts
Input Voltages	100 ~ 277 VAC
Number of Outputs	One

Product Specifications

ANZ#: Z095k, September 7, 2011

SPECIAL FEATURES

- UL1310, Class 2 and UL879 recognized
- Single output, constant current or constant voltage design
- IP66 compliant
- Suitable for dry and damp locations
- Designed for outdoor or indoor applications
- Suitable in standard electrical junction boxes
- ELV (trailing-edge) dimmable - Optional
- Active PFC reduces power consumption

ENVIRONMENTAL

Operating temperature: -30 to 50 °C
(De-rating : 2% per °C from 50~70°C)
Storage temperature: -40 to +85° C
Humidity (Non-Condensing): 5% to 95%
Cooling: Convection
Vibration Frequency: 5 to 50 Hz
MTBF: >100,000 Hours at full load and 25°C ambient conditions (MIL-217F)
EMC : Compliant to 47CFR, Part 2, Part15 and Cisp PUB, 22 Class B
Acoustic Noise: Less than 24db (20~20K Hz)

ELECTRICAL SPECIFICATIONS

Input range	100 ~ 304 VAC
Frequency	47 to 63 Hz
PF and THD	> 0.92 at full load, 115VAC; <20% full load, 230VAC
Crest Factor	1.5 max.
Inrush current	10.0 Amps maximum at 230VAC, cold start, 25° C
Input current	0.3 Amps maximum at 115VAC
Efficiency	85% typical at maximum load
EMI filtering	47CFR, Part 2, Part 15 and Cisp PUB, 22 Class B
Maximum power	20W
Current Accuracy	±1% (when applicable)
Load regulation	±3%
Leakage Current	300uA typ.
Hold up time	Half cycle minimum at 120 VAC and 80% of rated load
Protection	Over-voltage, Over current and Short circuit protection: Auto-recovery

SAFETY

UL	UL1310, Class 2 and UL879 recognized
cUL	UL1310, Class 2 and UL879 recognized
CE	

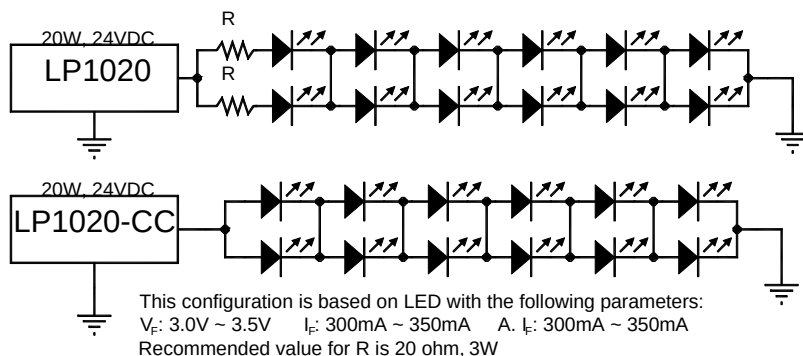
Note: 52VDC output is not cUL recognized

Model Number	Constant Voltage Mode			Model Number	Constant Current Mode		
	V (DC)	A (mA)	Watts		V (DC)	mA(Max.)	Watts
LP1020-52	52, ±5%	400	21	LP1020-52-Cxxxx	26~ 52	400, ±5%	21
LP1020-36	36, ±5%	550	20	LP1020-36-Cxxxx	18~ 36	550, ±5%	20
LP1020-24	24, ±5%	830	20	LP1020-24-Cxxxx	12~ 24	830, ±5%	20
LP1020-22	22, ±5%	910	20	LP1020-22-Cxxxx	12 ~ 22	910, ±5%	20
LP1020-18	18, ±5%	1100	20	LP1020-18-Cxxxx	9 ~ 18	1100, ±5%	20
LP1020-17	17, ±5%	1250	21	LP1020-17-Cxxxx	9 ~ 17	1250, ±5%	20
LP1020-15	15, ±5%	1330	20	LP1020-15-Cxxxx	9 ~ 15	1330, ±5%	20
LP1020-13	13, ±5%	1540	20	LP1020-13-Cxxxx	7 ~ 13	1540, ±5%	20
LP1020-12	12, ±5%	1760	21	LP1020-12-Cxxxx	7 ~ 12	1750, ±5%	21
LP1020-10	10, ±5%	2000	20	LP1020-10-Cxxxx	7 ~ 10	2000, ±5%	20

Note: The Constant Voltage models are not compatible with ELV dimmer

Note: The output current of Constant Current models are adjustable at factory from 50% ~ 100%.

RECOMMEND APPLICATION SCHEMATICS



MECHANICAL DRAWING

Model Information – Single DC output

LP1020-XX – Constant Voltage Model

XX – Available Output Voltage, refer to chart above

LP1020-XXC (YYY) – Constant Current Model

C – Stands for Constant Current Model

XX – Available Output Voltage

YYY – Available Constant Current Settings, 350mA or 700mA or 1050mA

AC input cable

AWG #20, two conductors UL PLTC type or equiv.

DC output cable

AWG #20, two conductors UL PLTC type or equiv.

