

IP 100W Single Output power supply

IP100 series

Features :

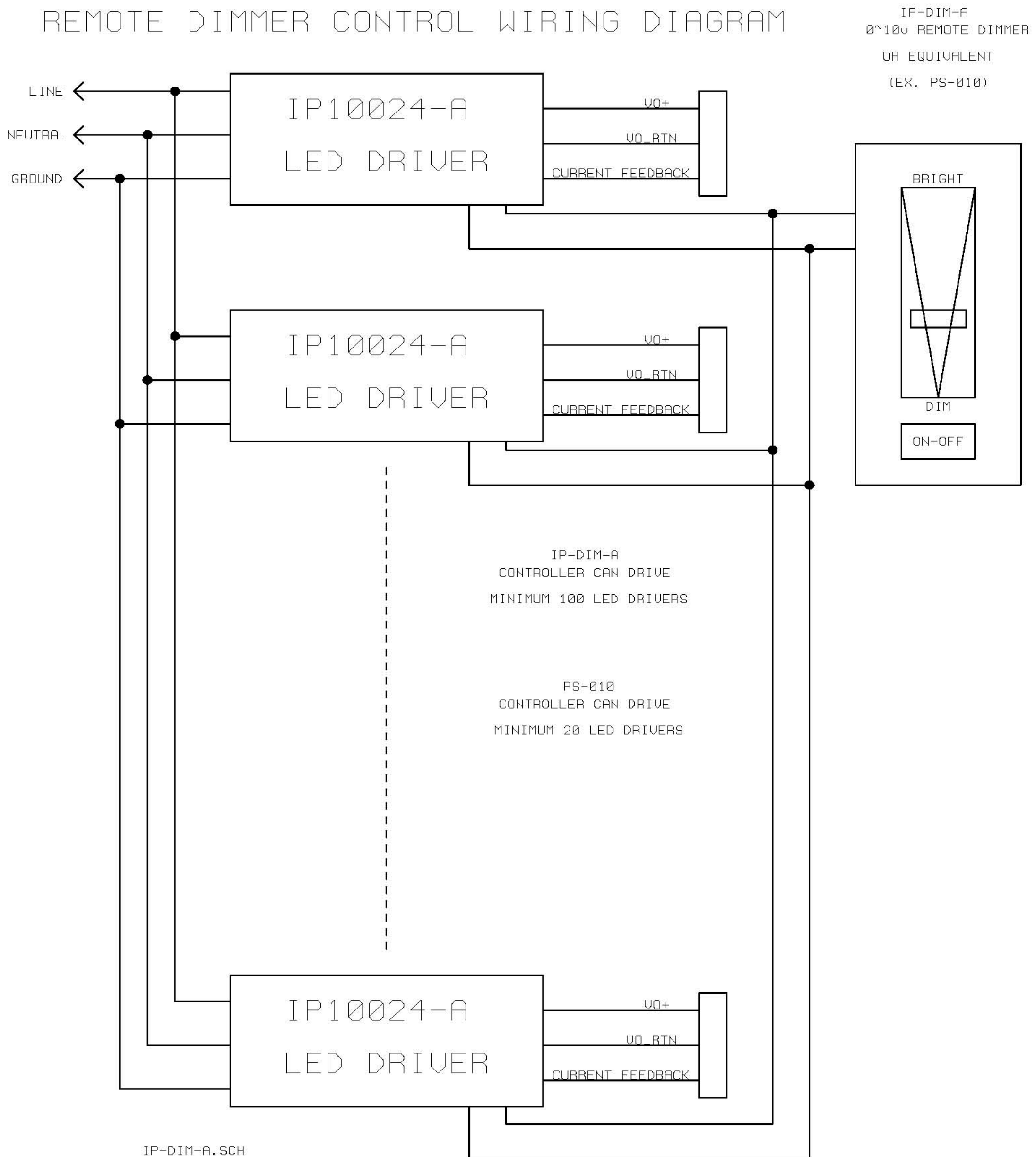
Universal AC input include industrial 277Vac input
 Built-in active PFC function. PF>0.9
 High efficiency up to 94%
 Protections: Short circuit /
 Free air convection cooling
 Constant voltage and constant current programmable
 IP67 design, suitable for dry / damp / wet locations
 Versatile dimming control:
 Available in: 0~10Vdc, variable resistor or logic PWM signal
 Compliance to worldwide safety regulations for lighting
 3 years warranty



SPECIFICATION

MODEL		IP100-A24	IP084-A24	IP060-A12	IP060-A24
INPUT	VOLTAGE AND FREQUENCY RANGE	100~277Vac ± 10% , 47 ~ 63Hz			
	AC CURRENT	2A maximum at any input voltage range at maximum load condition			
	INRUSH CURRENT(Typ.)	less than 40A at 110V input and less than 80A at 220V input			
	POWER FACTOR	0.90 minimum at 50% - 100% load,			
	LEAKAGE CURRENT	<0.75mA / 240VAC			
	TOTAL HARMONIC DISTORTION	Meet IEC1000-3-2, class C equipment			
OUTPUT	DC VOLTAGE	24V	24V	12V	24V
	VOLTAGE ADJ. RANGE N	+ 18V ~29V	+ 18V ~29V	+ 10.5V~15V	+ 18V ~29V
	Current (A) Minimum	0.0	0.0	0.0	0.0
	RATED CURRENT	4.17A	3.5A	5A	2.5A
	Current (A) Rated	100/Vo	84/Vo	60/Vo	60/Vo
	RATED POWER	100W	84W	60W	60W
	VOLTAGE TOLERANCE	+/- 3%	+/- 3%	+/- 3%	+/- 3%
	Combined Load/Line Regulation	Output Maximum full rated o/p, Voltage Regulation +/-3%, Tolerance +/-3%			
	Ripple and Noise	The ripple and noise is as follows when measured with maximum bandwidth of 20Mhz and 4.7uF/50V cross connected at output wire shall be less than 200mV			
	Temperature Coefficient	0.1% per degree C maximum			
	Efficiency	85% minimum at 120~277VAC at maximum load			
	Overshoot	3% maximum at power turn on or turn of			
	Turn-On Time	0.5S maximum to 90% of rated output. Turn on time measured with AC turned on at a zero-crossing point			
	Constant current program mode	Constant current programming are built-in with IP series power supply through control connector at < I_FB> input.			
	Constant current feedback voltage	200mV(200 mV is default, can be set at the factory from 50mV to 1V)			
Constant current mode option	Constant current programming are built-in with IP series power supply through control connector at < I_FB> input. Constant current feedback voltage 200mV(200 mV is default, can be set at the factory from 50mV to 1V)				
PWM dimming option	Output voltage can be PWM controlled by 0~10V dimmer through control connector at < 10V_CONTROL> input. PWM frequency= 135HZ +/- 10%				
PWM frequency	1KHZ +/- 10%				
PWM control option	option 1: Constant voltage output PWM control				
PROTECTION SPECIFICATIONS	OVER CURRENT	Output shall go into constant current regulation between 100% to 120% of rated output current. (constant current mode) and will go into hiccup mode when the output voltage is forced to go below 75% of the rated voltage.			
	SHORT CIRCUIT	output shall shut down and automatic restart			
	OVER VOLTAGE	Power supply shall shut down and latched off in the event of output voltage exceed 110~125% of the max rated voltage. To reset the latch, AC input power needs to be recycled.			
	OVER TEMPERATURE	Power supply shall reduce the output voltage and current at the out of spec high temperature condition and maintain the hot spot temperature below components rating.			
ENVIRONMENT	OPERATING TEMP.	nominal -40 to +60°C ambient at full load Linearly de-rate output power to 70% up to 80°C			
	OPERATING HUMIDITY	5% to 100%, non-condensing			
	Cooling Requirement	Natural air convection cooling			
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C 10 ~95% R.H			
	VIBRATION	Frequency 5 to 50 Hz, acceleration ±7.35 M/(S*S), direction X,Y and Z Axis			
	Transient surge sustainability	Meets 2KV per EN61000-4-5, Level 3, line to line, Criteria B, 4KV per EN61000-4-5, Level 4, line to ground, Criteria B,and ANSI C62.41-1991, Category A1, 2.5KV Ringwave			
SAFETY & EMC	SAFETY STANDARDS	Power supply is designed to meet the standards- UL1310 with class 2 output, UL file number pending			
	EMI CONDUCTION & RADIATION	Meet FCC Part 15 Class A, CISPR22.2 Class A			
	RELIABILITY	Mean Time Between Failure (MTBF) >100,000 hours, MIL-HDBK217E at 25 degrees C ambient.			
	HARMONIC CURRENT	Compliance to EN61000-3-2 Class C ; EN61000-3-3			
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61547, EN55024, heavy industry level (surge 4KV), criteria A			
	Warranty	3 years			
OTHERS	Physical Dimension	The power supply is a enclosed and potted with metal enclosure, IP68 rated			
	SIZE WITH JUNCTION BOX	155.7(L) X 65(W) X 31.8(H) mm, including mounting flanges			
	SIZE WITHOUT JUNCTION BOX	212.2(L) X 65(W) X 31.8(H) mm, including mounting flanges			
	Mounting dimensions	4 mounting holes, 146.3(L) X 30.35(W)			
	Input cable	6" ,18AWG wires, White (Neutral), Black (Line), Green (Chassis)			
	OUTput cable	6" ,18AWG wires, Red (Positive+), Blue(Negative-),			
	CONTROL cable	6" ,22AWG wires, Gray (CTRL_RTN), Purple(10V_CTRL), Orange(I_FB), Yellow(LED_OTP)			

REMOTE DIMMER CONTROL WIRING DIAGRAM



WIRING DIAGRAM FOR
0-10V PWM DIMMING

