



Features:

- Universal AC input /Full range (up to 305Vac)
- Output Current could be programmed in customer side
- Self-adapting Output Voltage, and range is large enough to match different LED load
- High power factor, Low harmonic current
- High Efficiency (up to 92%)
- Protections: Short circuit, Over Current, Over Voltage, Over Temperature
- Compliance to the testing requirement of double 85
- Cooling by free air convection
- IP67 design for indoor or outdoor installations
- Suitable for LED lighting and street lighting application
- 5 years warranty



Optional Function: 3 in one dimming function via signal cable (Built-in 3 in 1 dimming function, control the output current via connecting the control signal cable to resistor, PWM signal or DC voltage (0~10V) separately)
wireless programmable dimming function (timing controlled dimming function, PWM signal (5V or 10V), initial output current definition)

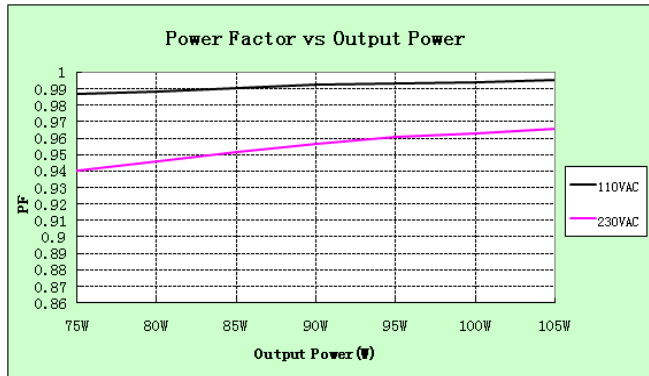
SPECIFICATION

Basic Model		WSJA-105-020VN	WSJA-105-060VN	WSJA-105-120VN
OUTPUT	Output Current Range	0.3A~3A	0.14A~1.4A	0.1A~0.86A
	Output Voltage	20~62Vdc,	60~150Vdc	120V~305V
	Rated Power	105W	105W	105W
	Ripple Current I'(max.)	350mA	450mA	500mA
	Output current regulation	±3%	±3%	±3%
	Turn-on Delay time	3Smax.@220Vac input & Full load, 5Smax.@100Vac input & Full load.		
	Turn-on Rise time	300mSmax.@ Full load		
INPUT	Voltage range	90V~305VAC	90V~305VAC	90V~305VAC
	Frequency Range	47Hz~63Hz	47Hz~63Hz	47Hz~63Hz
	Power Factor(Typ.)	PF>0.99 at 115VAC PF>0.97 at 230VAC	PF>0.99 at 115VAC PF>0.97 at 230VAC	PF>0.99 at 115VAC PF>0.97 at 230VAC
	Efficiency (Typ.)	92% at 230VAC	92% at 230VAC	92% at 230VAC
	AC Current	1.5Amax@100Vac-277Vac & Full Load		
	Inrush Current	50A max @ 230Vac input	50A max @ 230Vac input	50A max @ 230Vac input
	Standby input power (max.)	3Wmax.@ Nominal input	3Wmax.@ Nominal input	3Wmax.@ Nominal input
PROTECTION	Over Voltage	<68Vdc	<165Vdc	<330Vdc
	Short Circuit	When the output voltage is over the limitation, the product will shut down output, it can recovery when the fault condition is removed. The input power shall decrease when the output rail is shorted, the power supply shall have no damage, and shall recovery when the fault condition is removed.		
	Over Temperature	When Tc > 85℃, the output current will be decreased to protect the LED driver. When the temperature of the case go down below 85℃, the product will self-recovery. The minimum output current will be limited to 30% (typ.) of the rated output current in OTP function. The LED driver could survive in 125℃ for 2hrs.		
ENVIRONMENT	Operating Temp.	-40~60℃	-40~60℃	-40~60℃
	Operating Humidity	95% RH	95% RH	95% RH
	Storage Temp	-40~85C	-40~85C	-40~85C
	Water proof	IP67	IP67	IP67
	Vibration	The LED power supply can survive vibration towards three mutually perpendicular direction (X, Y, Z), each direction for 72 minutes. The vibration is in accordance with the sine wave with 2mm amplitude, and its frequency range from 10Hz to 500Hz with 5G acceleration		
RELIABILITY	MTBF	>200Khours @ 25℃		
SAFETY & EMC	SAFETY STANDARDS	UL8750, EN61347-1/A2:2013, EN61347-2-13: 2006, IEC61347-1, IEC61347-2-13, EN62493: 2010, GB19510.1-2009, GB19510.14-2009,		
	WITHSTAND VOLTAGE	I/P-O/P: 3750VAC	I/P-FG: 1650VAC	O/P-FG: 1600VAC
	LEAKAGE CURRENT	0.75mA max @ 277Vac 50Hz input		
	SURGE IMMUNITY	DM 5KV, CM 10KV		
	ISOLATION RESISTANCE	50MΩ min. at primary to secondary with 500Vdc test voltage		
	EMC EMISSION	Compliance to EN55015 (CISPR15), EN61000-3-2; EN61000-3-3, GB17743, GB17625.1		
MECHANICAL	EMC IMMUNITY	Compliance to EN61547; EN55042, EN61000-4-2,3,4,5,6,8,11, GB/T18595, GB17626		
	DIMENSION	178*68*39mm		
	WIGHT	760±50g		
OTHERS	COLOR	BLACK	BLACK	BLACK
	/	/	/	/
NOTE	<p>1. Ripple current are measured at full bandwidth of the oscillator. The actual ripple current rely on the characteristic of LED load.</p> <p>2.The power supply will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMCDirective on complete installation.</p> <p>3. All parametric in this datasheet is typical value</p>			

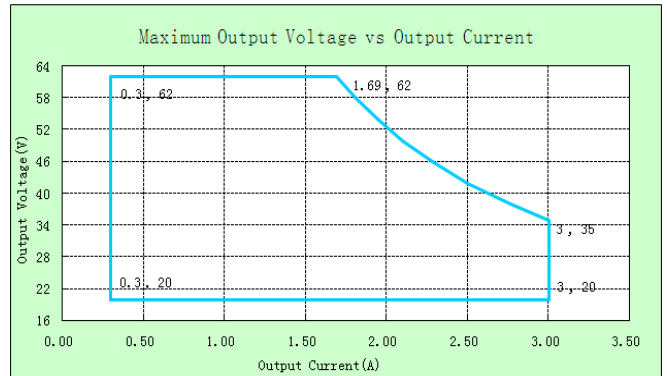
■ Characteristic Curve

Model: WSJA-105-020VN

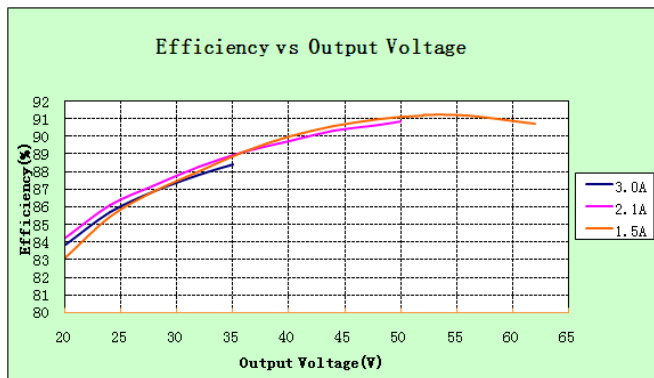
POWER FACTOR vs OUTPUT POWER



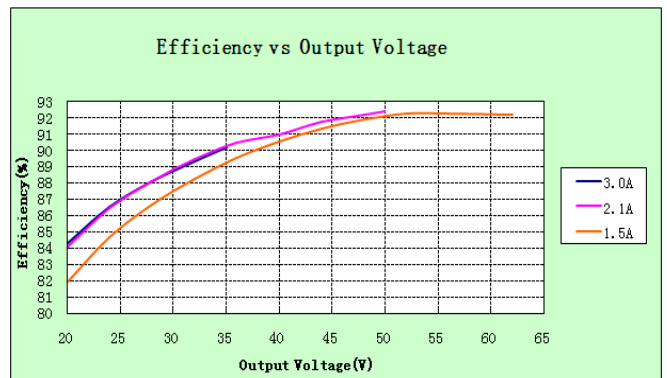
OUTPUT V-I OPERATING AREA



EFFICIENCY vs Vout (Vin=115Vac, Ta=25°C)

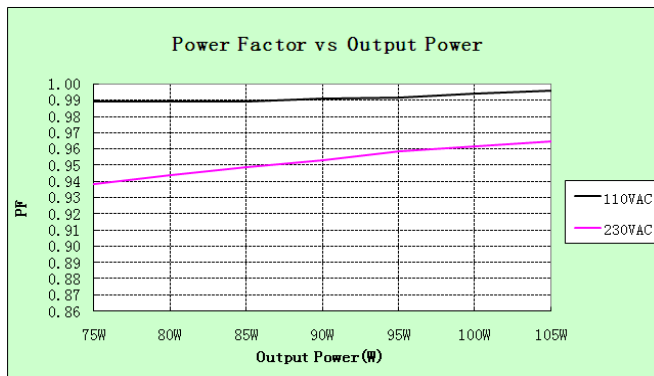


EFFICIENCY vs Vout (Vin=230Vac, Ta=25°C)

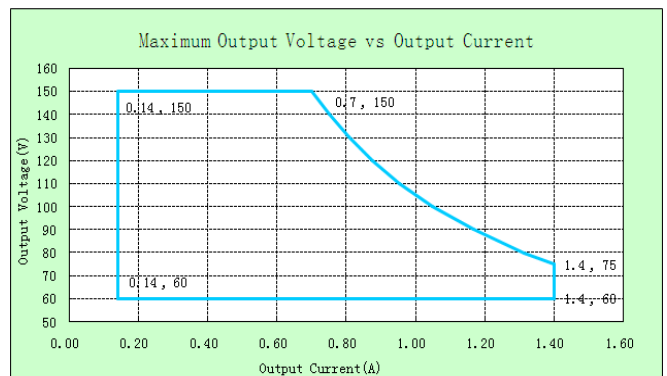


Model: WSJA-105-060VN

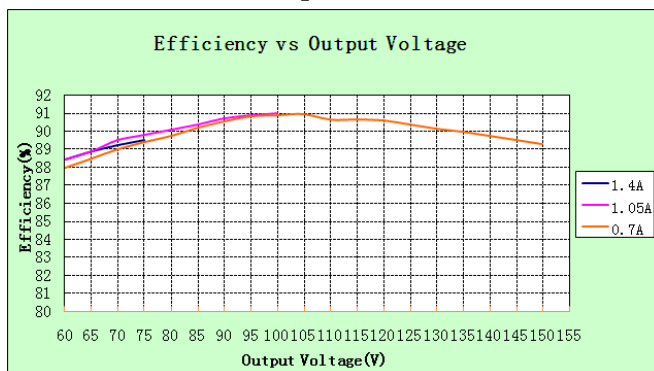
POWER FACTOR vs OUTPUT POWER



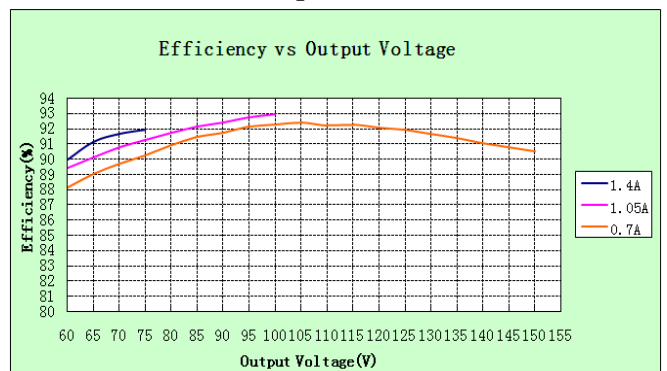
OUTPUT V-I OPERATING AREA



EFFICIENCY vs Vout (Vin=115Vac, Ta=25°C)

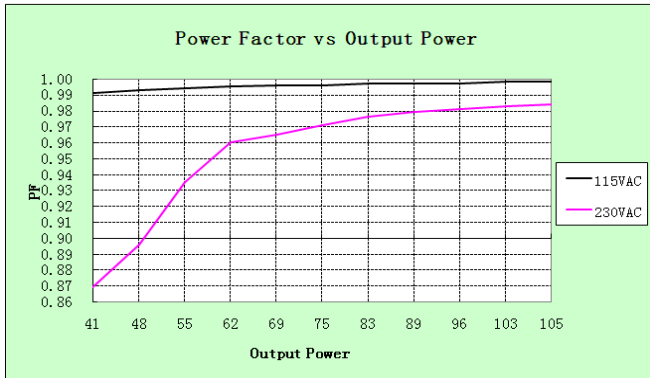


EFFICIENCY vs Vout (Vin=230Vac, Ta=25°C)

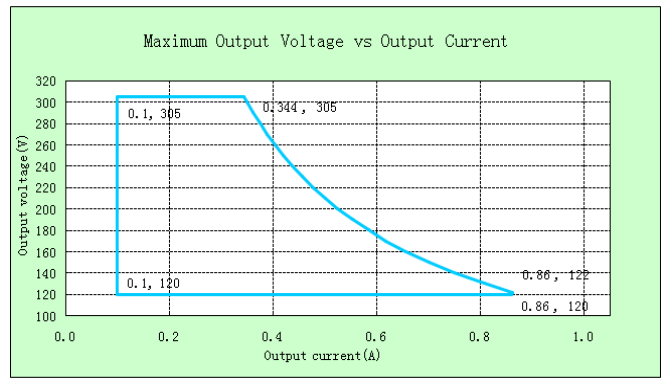


Model: WSJA-105-120VN

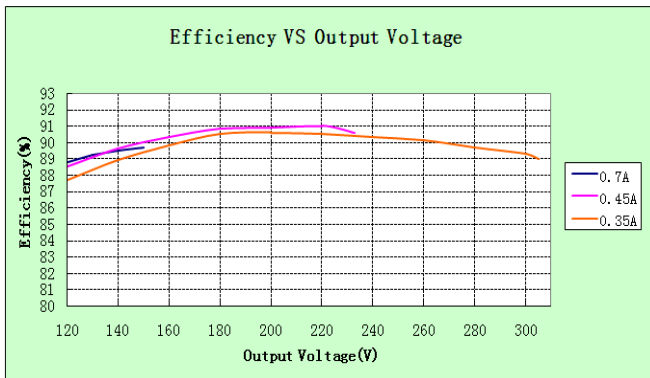
POWER FACTOR vs OUTPUT POWER



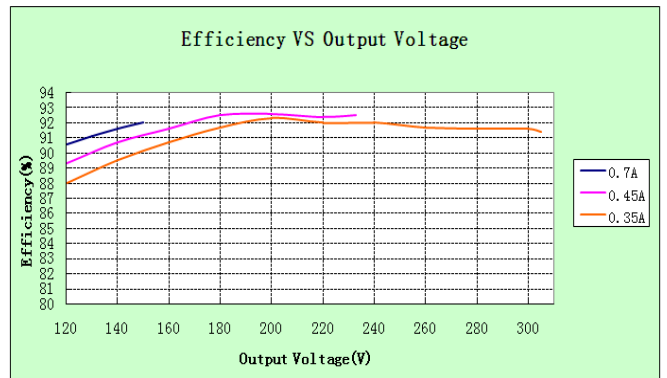
OUTPUT V-I OPERATING AREA



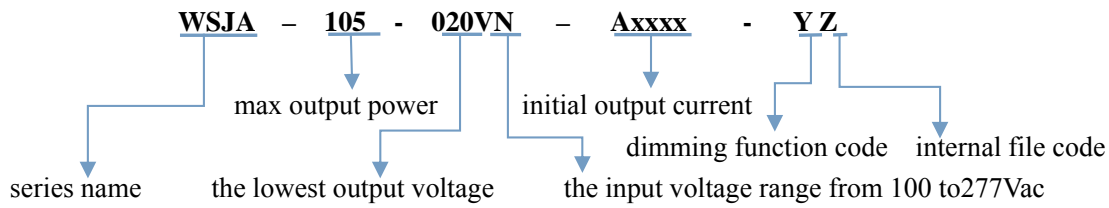
EFFICIENCY vs Voutput (Vin=115Vac, Ta=25°C)



EFFICIENCY vs Voutput (Vin=230Vac, Ta=25°C)



■ ILLUMINATION ON THE MODEL TYPE:



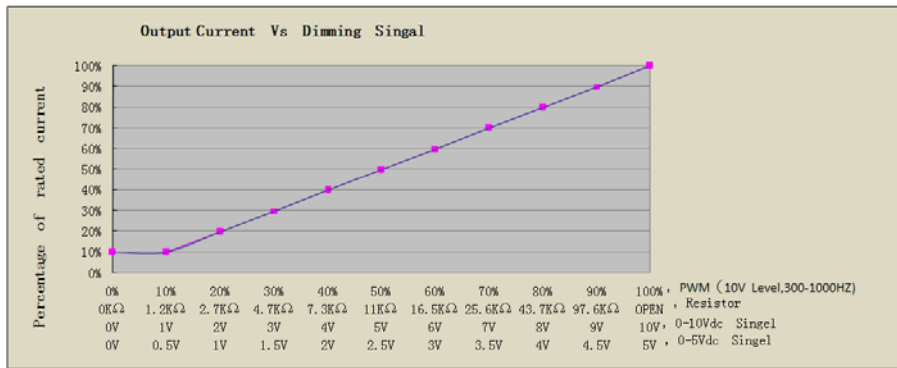
Dimming function code Y could be defined as A~D. Each letter represents one function, as below:

- Letter A: No dimming function
- Letter B: Built-in 3 in 1 dimming function via signal cable
- Letter C: wireless programmable dimming function
- Letter D: wireless programmable dimming function + 3 in 1 dimming function via signal cable

DIMMING FUNCTION DESCRIPTION (optional)

■ 3 in 1 dimming function

- ◆ Built-in 3 in 1 dimming function, control the output current via connecting the control signal cable to resistor, PWM signal or DC voltage (0~10V) separately
- ◆ The minimum output current limited to 10% of the maximum output current, and the minimum output power should not be less than 10W.
- ◆ The curve of output current versus the control signal of resistor/PWM/DC voltage separately as below:



■ Wireless Programming Dimming Function:

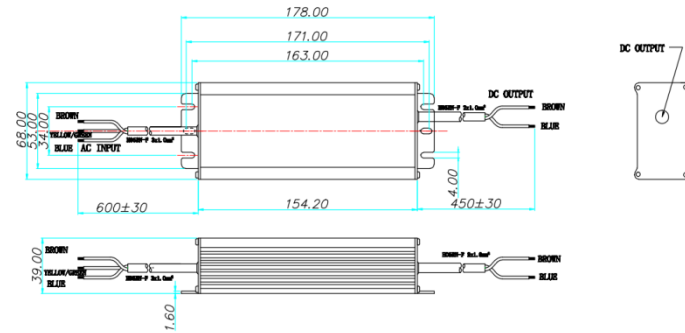
- ◆ Using the infrared remote controller to set up the initial output current;
- ◆ Using computer to Change the initial setup via the programmer provided by Brightway. All of the output current, timing controlled dimming function, and the voltage level (5V or 10V) of PWM signal could be re-defined.
- ◆ The timing controlled dimming function could be defined in manufactory, or customer program it with the programmer provided by wintek. The product supports 5 dimming stages at most to be defined.

Mechanical Specification

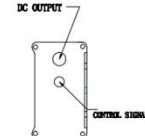
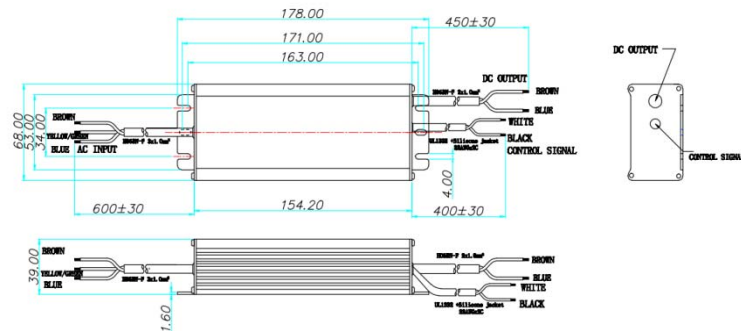
Case material	Aluminum Alloy
Dimension (L x W x H)	178*68*39mm
Net Weight	760 ± 50g
Case Color	BLACK
Input Cable	3x1.0mm ² H05RN-F IEC57 (YZW)
Output Cable	2x1.0mm ² H05RN-F IEC57 (YZW)

There are 4 mechanical types via different dimming functions:

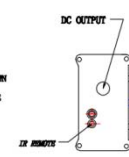
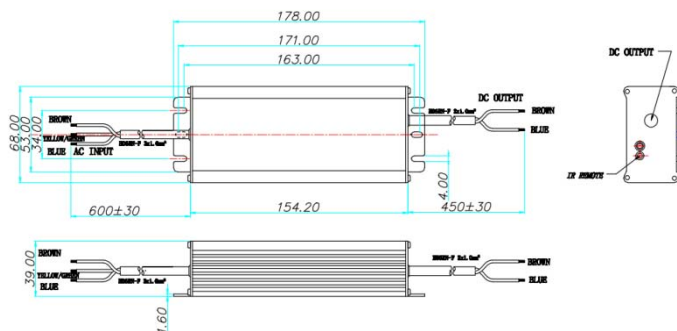
Type A: No dimming function



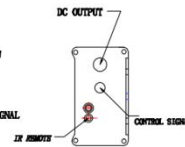
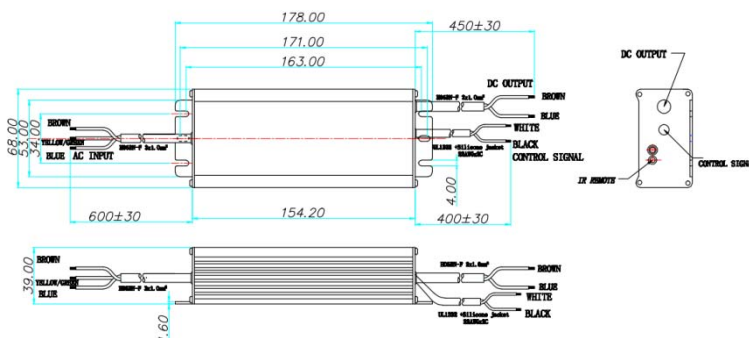
Type B: Dimming function via signal cable



Type C: Wireless programmable dimming function



Type D: wireless programmable dimming function + dimming function via signal cable



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