

200W WSDA SERIES



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 93%)
- 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

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ction: 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		WSDA-200-020VN	WSDA-200-060VN	WSDA-200-120VN	WSDA-200-230VN	
OUTPUT	Output Current Range	0.63A~6.3A	0.28A~2.8A	0.14A~1.4A	0.07A~0.7A	
	Output Voltage	20~54Vdc,	60~120Vdc	120V~305V	230V~445V	
	Rated Power	200W	200W	200W	200W	
	Ripple Current 1(max.)	200mA	200mA	200mA	200mA	
	Output current regulation	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$	±3%	
	Turn-on Delay time	3Smax.@220Vac input & Full load, 5Smax.@100Vac input & Full load.				
	Turn-on Rise time	300mSmax.@ Full load				
INPUT	Voltage ramge	90V~305VAC	90V~305VAC	90V~305VAC	90V~305VAC	
	Frequency Range	47Hz~63Hz	47Hz~63Hz	47Hz~63Hz	47Hz~63Hz	
	Power Factor(Typ.)	PF>0.99 at 115VAC	PF>0.99 at 115VAC	PF>0.99 at 115VAC	PF>0.99 at 115VAC	
		PF>0.97 at 230VAC	PF>0.97 at 230VAC	PF>0.97 at 230VAC	PF>0.98 at 230VAC	
	Efficiency (Typ.)	92% at 230VAC	93% at 230VAC	93% at 230VAC	93% at 230VAC	
	AC Current	2.8Amax@100Vac-277Vac & Full Load				
	Inrush Current	150A max @ 230Vac input	150A max @ 230Vac input	150A max @ 230Vac input	150A max @ 230Vac input	
	Standby input power (max.)	3Wmax.@ Nominal input	3Wmax.@ Nominal input	3Wmax.@ Nominal input	3Wmax.@ Nominal input	
PROTECTION	Over Voltage	<60Vdc	<130Vdc	<325Vdc	<460Vdc	
	0	When the output voltage is over the	e limitation, the product will shut dow	n output, it can recovery when the	fault condition is removed.	
	Short Circuit	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 $Tc > 85 °C$, the output curre	nt will be decreased to protect the LH	ED driver. When the temperature o	f the case go down below 85°C, 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°C for 2hrs.				
ENVIORNMENT	Operating Temp.	-40~60°C	-40~60°C	-40~60°C	-40~60°C	
	Operating Humidity	95% RH	95% RH	95% RH	95% RH	
	Storage Temp	-40~85C	-40~85C	-40~85C	-40~85C	
	Water proof	IP67	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 fragmany range from 10Hz to 500Hz with 5C acceleration				
RELIABILITY	MTBE	>200K hours @ 25°				
RELIADIEITT	SAFETY STANDARDS	200Kilouis @ 20 C				
	WITHSTAND VOLTAGE	U/P_O/P: 3750VAC I/P_FG: 1650VAC O/P_FG: 1660VAC				
	LEAKAGE CURPENT	0.75m A may @ 277Vac 50Hz input				
SAFETV & EMC	SUDGE IMMUNITY	DM SEV CM 10KV				
SAFETT &EMC	ISOLATION DESISTANCE	DIVLOK Y, CIVLIUN Y SOMO min at mimory to secondary with SOOVdo test voltage				
MECHANICAL	EMC EMISSION	Compliance to EN55015 (CISDD15) EN61000.2.2: EN61000.2.2: CD17742 CD17625.1				
	EMC EMISSION	Compliance to EN513013 (CISPK15), EN01000-5-2, EN01000-5-3, CB17/45, CB17/25,				
	DIMENSION	Compilance to EN01547, EN05042, EN01000-4-2,5,4,5,0,6,11, OD/110393, OB1/020				
	WICHT	20/*80*40mm				
	COLOR	1200±30g	DLACK	DLACK	DLACK	
OTHERS	COLOK	BLACK	BLACK	BLACK	BLACK	
NOTE	/ 1 Diala and a second				/	
NOTE	2. The measured are measured a	at full bandwidth of the oscillator. In	e actual ripple current fely on the char	acteristic of LED load.	to installation the final assistant	
	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.					
	3. All parametric in this datasheet is typical value					



Characteristic Curve

Model: WSDA-200-020VN

POWER FACTOR vs OUTPUT POWER



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



Model: WSDA-200-060VN

POWER FACTOR vs OUTPUT POWER



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



OUTPUT V-I OPERATING AREA



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



OUTPUT V-I OPERATING AREA



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





Model: WSDA-200-120VN

POWER FACTOR vs OUTPUT POWER



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



Model: WSDA-200-230VN

POWER FACTOR vs OUTPUT POWER



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



OUTPUT V-I OPERATING AREA





Efficiency VS Output Voltage 95 94 93 92 Efficiency (%) 91 90 89 88 87 86 -1.05A 0.7A 0.65A 85 120 140 160 180 200 220 240 260 280 300 320 Output Voltage (V)

Maximum Output Voltage vs. Output Current 450 430 0.45 , 445 d. 07 , 44 410 390 370 350 330 310 290 270 250 Output voltage(V) 0.7, 286 d. 07 , -23 230 210 0.7 ; 230 0.1 0.2 0.3 0.4 0.5 0.6 0.8 0.0 0.7 Output current(A)

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



OUTPUT V-I OPERATING AREA



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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.



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Mechanical Specification

Case material	Aluminum Alloy
Dimension (L x W x H)	207*80*40mm
Net Weight	$1300\pm 50g$
Case Color	BLACK
Input Cable	3x1.0mm2 H05RN-F IEC57 (YZW)
Output Cable	2x1.0mm2 H05RN-F IEC57 (YZW)

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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