## Email: support@starwell.cc



.Constant voltage design

.High input voltage

- .Small dimension, High efficiency, High reliability, Long lifetime
- .Ip67 design for outdoor installation
- .Working temperature:  $-25^{\circ}C$  ~+60  $^{\circ}C$
- .Protections: Overload, Over voltage, Short-circuit, etc.
- .Typical efficiency: 90%
- .CE\IP67 certified, RoHS compliant
- .100% full load burn-in test.

SPECIFICATION						
Model Number         VA-12200D1690         VA-24200D1690						
	DC Voltage	12V	24V			
Output	Rated current	16.7A	8.33A			
	Current range	0-16.7A	0-8.33A			
	Rated power	200W	200W			
	Ripple and Noise(max.) Note4	240mVp-p	240mVp-p			
	Voltage tolerance Note3	±4%	±2%			
	Line regulation	±1%	$\pm 0.5\%$			
	Load regulation	±2%	±1%			
	Output groups	2	1			
	Set up time Note6	3000ms, 50ms(at full load)230Vac				
	Holding time(Typ.)	15ms(at full load) 230Vac				
	Voltage range Note 2	170~264Vac or 255~374Vdc				
Input	Frequency range	47~63Hz				
	Power factor(Typ.)	PF≥0.5/230V(at full load)				
	Efficiency(Typ.)	90%	90%			
	AC current	2.3A/230Vac				
	Inrush current(Typ.)	Cold start: 65A/230Vac				
	Leakage current	<0.75mA/240Vac				
Protection	Over load	105%-135% of the rated output power				
		Protection mode: Hiccup mode, recovers automatically after fault conditions removed.				
	Short circuit	Protection type: Hiccup mode, recovers automatically after fault conditions removed.				
	Over voltage	13.0-18.0V 24.5-35.0V				
		Protection type: Hiccup mode, recovers automatically after fault conditions removed.				
	Over temperature	70°C~±5°C(RTH2)				
		Protection mode: Power off the output voltage, self-recovery when the temperature reduced				
Environment	Working temperature	-25°C~+60°C				
	Working humidity	10%~90%RH, non-condensing				
	Storage temp. and humidity	-25℃ <sup>~</sup> +75℃, 5%~95%RH				
	Temp. coefficient	±0.05%/°C (0~50°C)				
	Vibration					
		10-300Hz, 1G 10min./cycle, period for 60min. each along X, Y, Z axes				
Safe and EMC	Safety standards	Compliance to EN61347-1, EN61347-2-13, Ip67 waterproof rating.				
	Withstand voltage	I/P-O/P: 3.75KVAC I/P-FG: 1.875KVAC O/P-FG: 0.5kVAC				
	Insolation resistance EMC Emission	I/P-O/P, I/P-FG, O/P-FG: 100Mohms/500Vdc 25°C/70%RH				
	EMC Immunity					
Others	MTBF	≥200Khrs, MIL-HDBK-217F(25℃)				
	Dimension	235X67.2X34mm(L*W*H)				
	Packing	1.02Kg/PCS, 14PCS/14.3Kg/box, (437X272X185mm)				
Others			<u>, ,</u>	37X272X185mm)		
NOTE	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Derating may be needed under low input voltages. Please check the static characteristics for more details.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>Ripple &amp; noise are measured at 20MHZ of bandwidth by using twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-confirm EMC Directive on the complete installation of cold star, continuous switching on/off may raise the start time.</li> </ol>					

