

# Power System 1006

RECTIFIER MODULES	12-18	12-30	24-15	24-30	48-12	48-25	60-15
<b>Input</b>							
Nominal Voltage (-15%, +12%)	100 ~ 240 V <sub>AC</sub>						
Voltage range	85V <sub>AC</sub> to 270V <sub>AC</sub>						
Maximal current (at full load) <sup>1</sup>	N*3.5A	N*6A	N*6A	N*10A	N*6A	N*6A	N*10A
Frequency	47Hz to 63Hz						
Power factor (at full load)	≥ 0.99						
<b>Output</b>							
Voltage (default)	13.5 ±0.2 V <sub>DC</sub>	27 ±0.2 V <sub>DC</sub>	27 ±0.2 V <sub>DC</sub>	54 ±0.2 V <sub>DC</sub>	54 ±0.2 V <sub>DC</sub>	47 - 60 V <sub>DC</sub>	67.5±0.2 V <sub>DC</sub>
Adjustable range	10 - 15 V <sub>DC</sub>	20 - 30 V <sub>DC</sub>	20 - 30 V <sub>DC</sub>	± 0.5%	± 0.5%	47 - 60 V <sub>DC</sub>	60 - 75 V <sub>DC</sub>
Regulation (line & load)							
Nominal Current <sup>1</sup>	N*18A	N*30A	N*15A	N*30A (V <sub>in</sub> >100 V) N*20A (V <sub>in</sub> <100 V)	N*12A (V <sub>in</sub> >150 V) N*8A (V <sub>in</sub> <150 V)	N*25A (V <sub>in</sub> >165 V) N*18A (165>V <sub>in</sub> >120) <sup>5</sup>	N*15A (V <sub>in</sub> >100 V) N*10A (V <sub>in</sub> <100 V)
Ripple & noise @ BW=30MHz	200mV <sub>p-p</sub> , 20mVrms						
Psophometric noise	-62 dbm over 600Ω (<2mV)						
Efficiency (nominal load)	86% @ 230 V <sub>AC</sub> 82% @ 115 V <sub>AC</sub>	88% @ 230 V <sub>AC</sub> 84% @ 115 V <sub>AC</sub>	89% @ 230 V <sub>AC</sub> 85% @ 115 V <sub>AC</sub>	91% @ 230 V <sub>AC</sub> 87% @ 115 V <sub>AC</sub>			
Overload current <sup>1</sup>	<N*20A	<N*7A	<N*16A	<N*31A (V <sub>in</sub> >100 V) <N*21A (V <sub>in</sub> <100 V)	<N*13A (V <sub>in</sub> >150 V) <N*9A (V <sub>in</sub> <150 V)	<N*26A (V <sub>in</sub> >165V) <N*19A(165V >V <sub>in</sub> >120 V)	<N*18A
(Short circuit current, V <sub>o</sub> =0)	N*3A<I <sub>SC</sub> <N*5A	N*6A<I <sub>SC</sub> <N*8A	N*3A<I <sub>SC</sub> <N*4A	N*6A<I <sub>SC</sub> <N*8A	N*3A<I <sub>SC</sub> <N*5A	N*4A<I <sub>SC</sub> <N*6A	N*3A<I <sub>SC</sub> <N*5A
Over-voltage protection	15V	30V	30V	60V	60V	60V	75V
Walk-in time	< 1 sec						
Hold-up time (fully loaded)	40ms	20ms	20ms	10ms	15ms	10ms	10ms
Output current indication	10 LED's bar-graph (1 <sup>st</sup> LED indicates operation only)						
Active current sharing	±10% accuracy at full load						
<b>General</b>							
System controller <sup>2</sup>	Full status monitoring and communication with a PC, dedicated Graphical User Interface						
Withstand voltage (1 min) <sup>3</sup>	3000 V <sub>AC</sub> INPUT/OUTPUT, 1500 V <sub>AC</sub> INPUT/GND1000 V <sub>DC</sub> OUTPUT/GND						
Operating temperature	-10 to 65°C	-10 to 45°C	-10 to 65°C	-10 to 45°C	-10 to 65°C	-10 to 40°C	-10 to 40°C
Humidity	<95% non-condensing, equipped with standard PS1006 rack						
Storage temperature	-20 to 80°C						
EMC	EN 300 386-2 V1.1.3 (1997), EN55022, EN 6100 -4-2,3,4,5,6,11 EN 61000-3-2 and EN 61000-3-3						
Safety	According to IEC950, EN60950						
Dimension (mm)	Subrack 19" (W); 3U (H) 320 w/o terminals; 360 with terminals (D)						
Weight (Kg)	Rectifier module 60 (W); 135 (H); 235 (D)mm						
	Subrack <sup>1</sup> (N*1kg)+4.2 kg (fully equipped system – max. 10.2 kg)						
	Rectifier module 1 kg						
<b>ELVD</b>							
Max. current withstand	2x60 ADC or 1x100A						
Trip voltage levels <sup>4</sup>	Disconnect: 42 ± 0.5 V <sub>DC</sub> ; Reconnect (AC line recovers): 49 ± 0.5 V <sub>DC</sub>						

- N=number of modules
- Basic Shelf 1 has V/A meter. Basic Shelf 2 has a system controller.
- Equivalent DC test voltage is applied to overcome Y-capacitors leakage current to ground.
- Programmable with SC1006 if included
- N\*18A to N\*12A decreases linearly for V<sub>in</sub><120V [N\*12A (for V<sub>in</sub>=85 V)]

