



# DC/DC 新能源高压电源模块

## JWDX--20W 新能源高压电源模块双路输出系列

JWDX--20W New energy high input power supply module dual output series

### 典型性能 Typical Performance

- ◆外形尺寸: 72\*50\*28 (mm)  
Dimension: 72\*50\*28 (mm)
- ◆宽输入电压范围 (6:1 和 10: 1 输入电压范围)  
Wide range input voltage (6: 1 & 10: 1 range input voltage)
- ◆105°C长寿命电解电容  
105°C long life electrolytic capacitors
- ◆高效率、高功率密度、低纹波  
High efficiency、High power density、Low ripple & noise
- ◆黑金属外壳, 八面屏蔽, 通孔安装  
Black metal shell, Eight face shield, Hole is installed
- ◆安规: EN60950  
Ann rules: EN60950



### 输入特性 Input Features

输入电压范围 Input voltage range	标称 700V Nominal voltage 700V 标称 1100V Nominal voltage 24V	200~1200VDC  200~2000VDC
输入冲击电流 Inrush current	200V 600V 1200V 2000V	≦ 10A ≦ 30A ≦ 60A ≦ 100A
输入欠压保护 Input under-voltage protection	欠压保护点 Under-voltage protection point	175~185V

### 输出特性 Output Features

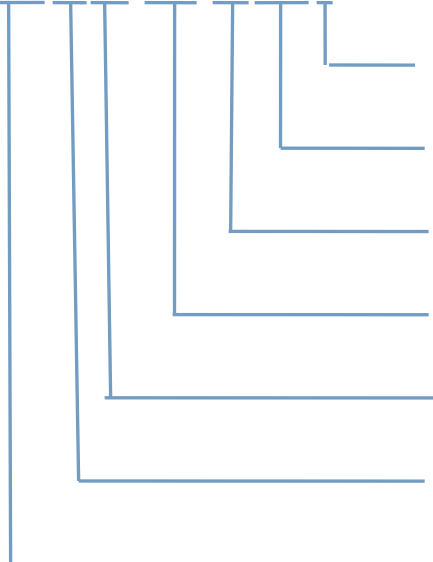
输出电压精度 Voltage tolerance	标称电压 Nominal voltage	$V_{o1} \leq \pm 1\%$ ( $5V \leq \pm 2\%$ ), $V_{o2} \leq \pm 3\%$
电压调整率 Line regulation (full load)	输入电压从低端到高端变化 Change of input voltage from lowend to highend	$V_{o1} \leq \pm 0.5\%$ , $v_{o2} \leq \pm 1.5\%$
负载调整率 Load regul	20%~100%负载变化 20%~100% Load change	$V_{o1} \leq \pm 0.5\%$ , $v_{o2} \leq \pm 3\%$
温度系数 Temperature coefficient		$\pm 0.02\%/^{\circ}C$
过功率保护 Output overload Protection		115~150%额定电流, 自恢复 115~150%rated output power, auto recovery
短路保护 Short Circuit Protection		长期, 自恢复 Long-term, auto recovery

### 一般特性 General Features

隔离耐压 Withstand voltage	输入对输出 (1分钟, 漏电流 $\leq 5mA$ I/P-O/P (1Mintute, leakage current) $\leq 5mA$ )	4000VDC
绝缘电阻 Isolation resistance	1000V	$\geq 100M\Omega$
MTBF	环境 25°C Environment 25°C	$2.0 \times 10^5$ Hrs
开关频率 switching frequency		65KHz
工作温度 Operating temperature	55°C以上降额使用 Above 55°C derating make	-40°C~70°C
储存温度 Storage temperature		-40°C~85°C
工作相对湿度 Operating humidity	无凝露及结冰现象 (non condensing)	10%~90%RH
储存相对湿度 Storage humidity	无凝露及结冰现象 (non condensing)	5%~95%RH
冷却方式 Cooling method		自然冷却 Convection

### 命名方式 Naming Rules

JWD X20-700 S5S12I



- 隔离输出  
Isolate output
- 输出电压  $V_{o2}$   
Output voltage  $V_{o2}$
- 输出电压  $V_{o1}$   
Output voltage  $V_{o1}$
- 标称输入电压  
Nominal Input voltage
- 输出功率  
Output power
- 新能源产品  
New enrgy product
- DC/DC 电源模块  
DC/DC power module

**产品选型** Product selection

产品型号 Model No.	输入电压 Input voltage $V_{in}$	输出电压 Output voltage $V_o$	输出电流 Output current $I_o$	输出电压精度 Output voltage tolerance	纹波噪声 R&N $V_{(P-P)mV}$	效率 Efficiency	
JWDX20-700S5S12I	200~1200V	+5V	0.30~3.00A	±2%	80mV	78%	
JWDX20-700S5S15I		+12V	0.04~0.42A	±3%	120mV		
JWDX20-700S5S24I		+5V	0.30~3.00A	±2%	80mV	81%	
JWDX20-700S12S5I		+15V	0.03~0.34A	±3%	120mV		
JWDX20-700S12S5I		+5V	0.30~3.00A	±2%	80mV	80%	
JWDX20-700S12S5I		+24V	0.02~0.21A	±3%	150mV		
JWDX20-1100S5S12I		200~2000V	+12V	0.10~1.25A	±1%	120mV	78%
JWDX20-1100S5S12I			+5V	0.30~3.00A	±2%	80mV	
JWDX20-1100S5S15I	+5V		0.30~3.00A	±2%	80mV	79%	
JWDX20-1100S5S15I	+15V		0.03~0.34A	±3%	120mV		
JWDX20-1100S5S24I	+5V		0.30~3.00A	±2%	80mV	80%	
JWDX20-1100S5S24I	+24V		0.02~0.21A	±3%	150mV		
JWDX20-1100S12S5I	+12V		0.10~1.25A	±1%	120mV	80%	
JWDX20-1100S12S5I	+5V		0.10~1.00A	±5%	80mV		

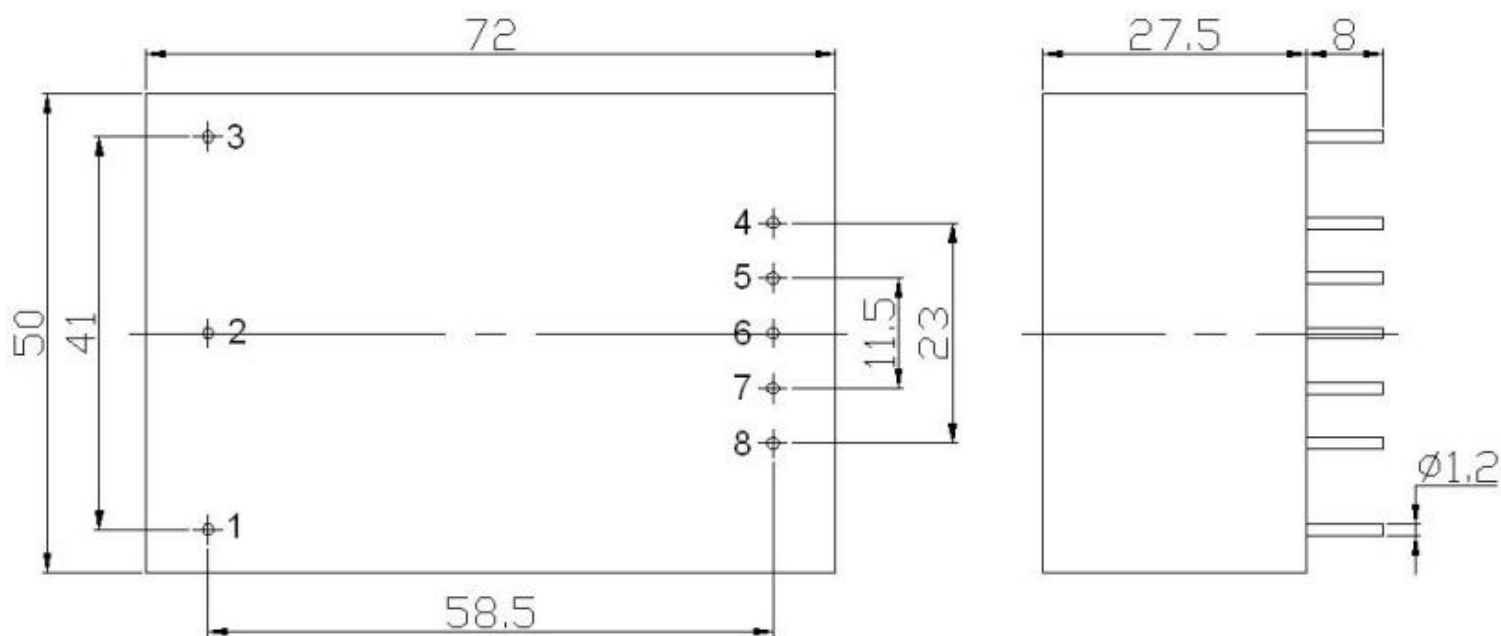
注：因篇幅有限，以上只是部分产品列表，若需列表以外产品，请与本公司销售部联系。

输出纹波噪声（峰-峰值）的测量，请参照模块测试说明中介绍的方法进行。

Note: Due to space limitations, the above list is only for some products, if other than a list of products, please contact the Company's sales department.

Output ripple noise measurement (peak - peak), please refer to the module test notes method is introduced.

**封装尺寸图** Mechanical Data

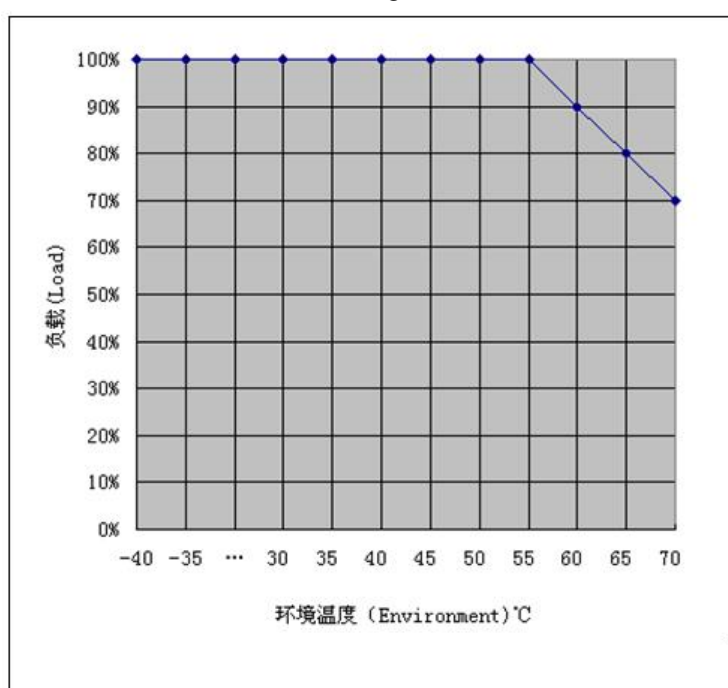


**管脚定义** Pin Assignments

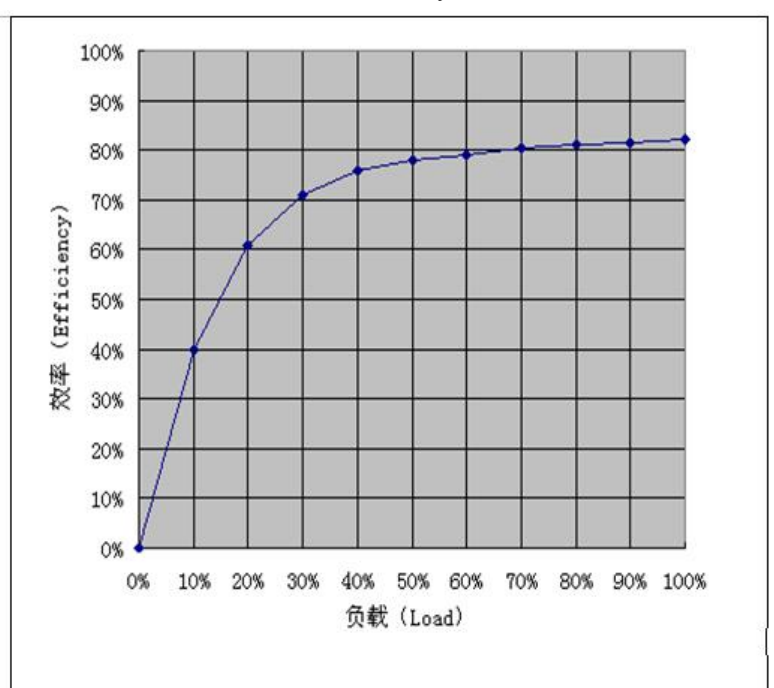
P1	P2	P3	P4	P5	P6	P7	P8
FG	$V_{in+}$	$V_{in-}$	$V_{O2+}$	GND2	NP	$V_{O1+}$	GND1

**典型曲线** Typical curve

降额曲线  
Derating curve



效率曲线  
Efficiency curve



**纹波噪声测试：（靠测法 20MHz）**

测试方法：纹波&噪声用示波器来测试。测试模块噪声时为了避免引入额外噪声，须用示波器探头直接接触模块输出引脚

