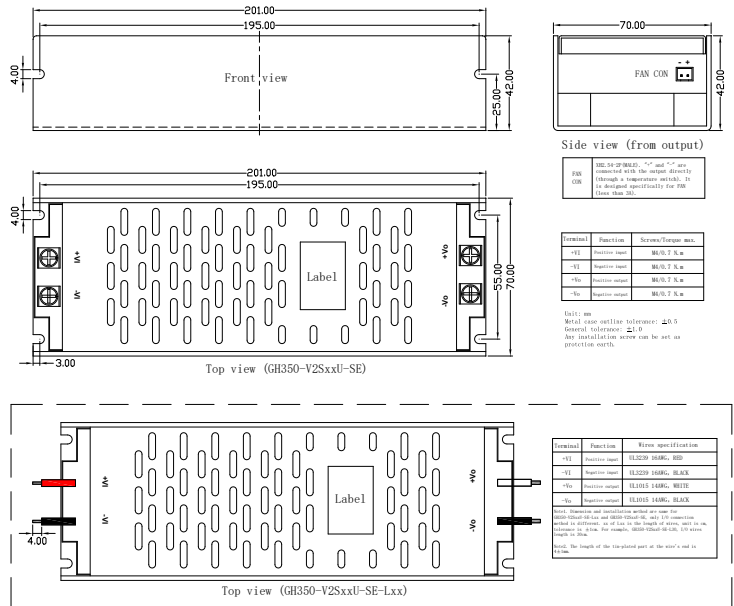




GH350-V2SxxU-SE(-Lxx) DC-DC Power Supply Module Ultra wide input, isolated single output

Product Characteristics

- Ultra wide input voltage range, 250-1500VDC
- Designed reference to EN62109 and UL1741
- Input and output isolation, 4000VAC
- Applications: photovoltaic power station, energy storage system, other high voltage input industrial equipment
- Input reversed polarity protection, UVP
- Output protection, OCP and SCP
- No minimum load requirement

Model Selection Table

Model	Dimensions (L*W*H)	Output power		Output voltage/current		Typical efficiency (Vin=800VDC)
		RATED	PULSE	RATED	PULSE	
GH350-V2S12U-SE	201*70*42mm	150W	260W (3min)	12V/12.5A	12V/21.7A	82%
GH350-V2S15U-SE				15V/10.0A	15V/17.3A	83%
GH350-V2S24U-SE		200W	350W (3min)	24V/8.33A	24V/14.6A	87%
GH350-V2S28U-SE				28V/7.14A	28V/12.5A	87%
GH350-V2S32U-SE				32V/6.25A	32V/10.9A	88%
GH350-V2S48U-SE				48V/4.16A	48V/7.29A	90%

Notel: Adding suffix of “-Lxx” means the module has input and output wires, and “xx” is the length with unit of cm, please reference to the related description in the dimension drawing.

Note2: For module with output voltage of 24V (or higher), 260W output power can be used if suitable fan is adapted, and less than 200W if no fan is available, please reference to the derating curves.

Input Characteristics

Item	Test Condition / Description	MIN	TYP	MAX
Input voltage range	DC input	250VDC	1000VDC	1500VDC
Input current	Vin = 1500VDC	-	400mA	-
Surge current	Vin = 250VDC	-	30A	-
Input UVP	Input under voltage trigger point	-	220VDC	-
	Input under voltage released point	-	240VDC	-
Input reversed polarity protection	If input polarity is reversed, the PSU should not be damaged	Available		
External input fuse		Required		

Output Characteristics

Item	Test Condition / Description	MIN	TYP	MAX
Voltage accuracy		-	±2%	-
Line regulation	100%Io	-	±1.5%	-
Load regulation	10%-100%Io	-	±1.5%	-
Ripple and noise*1	20MHz bandwidth (Peak-peak value)	-	300mV	-
OCP	Output over current protection	≥110%Io, Self recovery		
SCP*2	Output short circuit protection	Self recovery		
Minimum load		0	-	-
Start-up delay time		-	3s	-
Hold-up time		-	10ms	-
Hot plug		Prohibited		
Paralleled working		Prohibited		

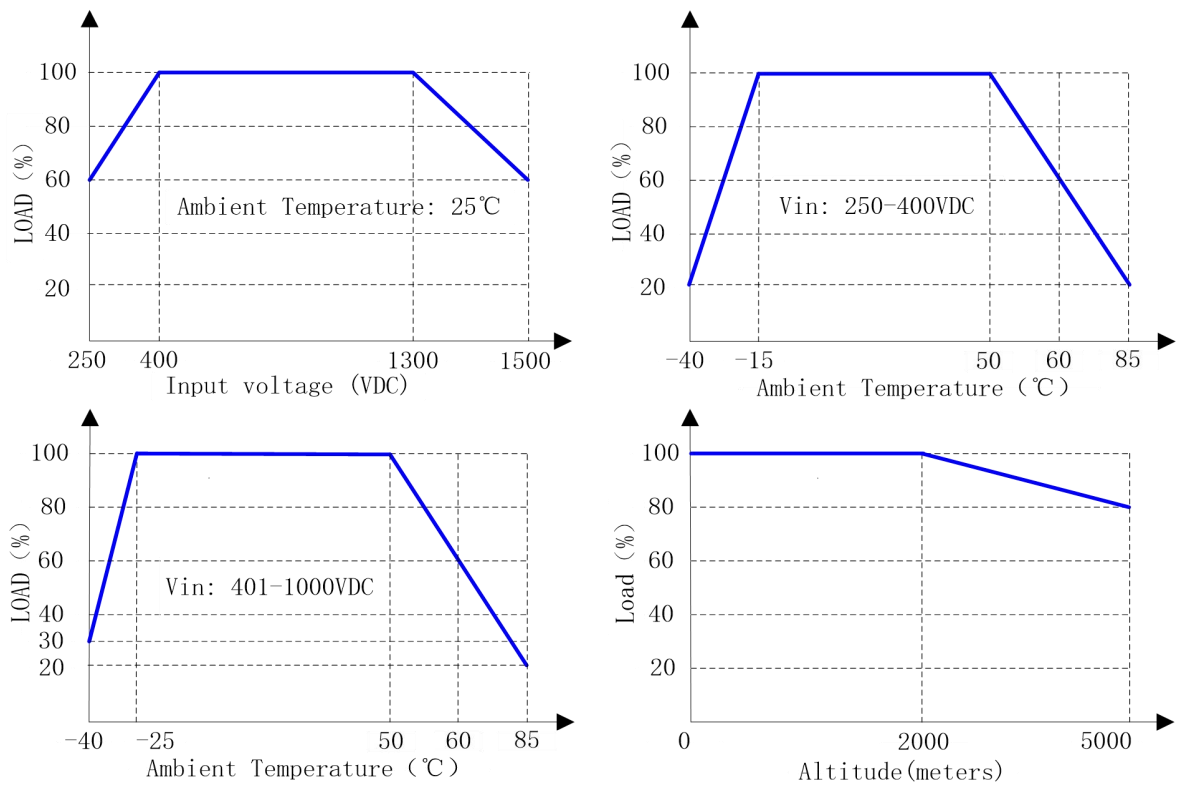
Remark *1: Oscilloscope probe should be connected with the paralleled combination of a 10uF high frequency low resistance electrolytic capacitor and a 0.1uF ceramic capacitor.

General Characteristics

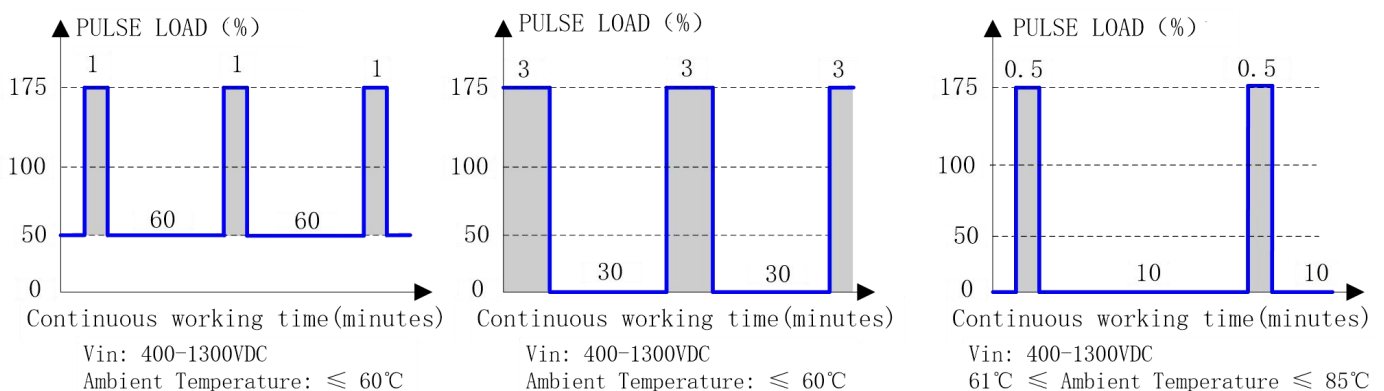
Item	Test Condition / Description	MIN	TYP	MAX
Working temperature		-40℃	-	+85℃
Storage temperature		-40℃	-	+85℃
Storage humidity		-	-	95%RH
Switching frequency		-	65kHz	-

Isolation voltage	Input to output, 60s, ≤5mA		4000VAC	-	-
	Input to case, 60s, ≤5mA		2000VAC	-	-
	output to case, 60s, ≤5mA		2000VAC	-	-
MTBF	MIL-HDBK-217F@25℃		215000h	-	-
Weight			-	680g	-
Cooling method	For Vo ≥ 24V modules	Output power < 200W	Natural air cooling		
		Output power ≥ 200W	Forced air cooling		
	FAN terminal is XH2.54-2P (MALE), connected with the output directly (fan voltage should be same with the module's output voltage).				

Derating Curves

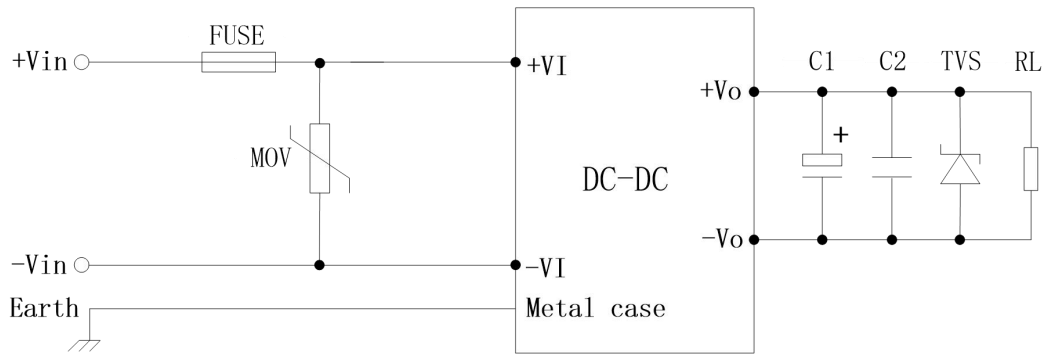


Comment: Derating should be considered base on temperature, input voltage and altitude.



Application Notes

1. Application circuit recommendation



2. Input part recommendation

Component	Function and description	Recommendation
FUSE	Cut off fault circuit	Required, 5A/1500V
MOV	Absorb surge energy	Varistor, two 112KD14 in series

3. Output part recommendation

Output voltage	C1	C2	TVS	RL
12V	680 μ F/25V	1 μ F/50V	1.5KE18CA	User load
15V	680 μ F/25V	1 μ F/50V	1.5KE20CA	
24V	470 μ F/35V	1 μ F/50V	1.5KE30CA	
28V	470 μ F/35V	1 μ F/50V	1.5KE36CA	
32V	220 μ F/50V	1 μ F/50V	1.5KE39CA	
48V	100 μ F/63V	1 μ F/100V	1.5KE62CA	

Remarks:

- C1: Output filter electrolytic capacitor, high frequency low resistance electrolytic capacitor is recommended.
- C2: Ceramic capacitor to suppress high frequency noise.
- TVS: Transient suppression diode to protect post-stage circuit (user load).

Notes:

- If not specified, the test condition is ambient temperature 25 $^{\circ}$ C, humidity < 75%, input voltage 800VDC and output rated load.
- All parameters listed in the data sheet are tested according to the company's enterprise standards.
- Guangzhou Guantu Electronic Technology Co., Ltd. has the right of final interpretation of the copyright and product.
- This version is 2025.01 A0. The specification may be changed without notice.
- GTL POWER can provide product customization service, please contact us or visit <http://www.gtl-power.com> and provide more detail technical requirements.