



SITOP PSU100D/1AC/12VDC/8.5A

PSU100D 12 V/8.5 A stabilized power supply input: 100-240 V AC output: 12 V DC/8.5 A

Technical Product Detail Page

<https://i.siemens.com/1P6EP1322-1LD01>

input	
type of the power supply network	1-phase AC
supply voltage at AC	
• minimum rated value	100 V
• maximum rated value	240 V
• initial value	90 V
• full-scale value	264 V
wide range input	Yes
overvoltage overload capability	1.25 × Vin rated, 500 ms
buffering time for rated value of the output current in the event of power failure minimum	9 ms
operating condition of the mains buffering	at Vin = 115/230 V
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 100 V	2.2 A
• at rated input voltage 240 V	1.2 A
current limitation of inrush current at 25 °C maximum	55 A
I2t value maximum	2.5 A ² ·s
fuse protection type	T4AL250V (internal)
fuse protection type in the feeder	Recommended miniature circuit breaker: from 16 A characteristic B, from 20 A characteristic B (for North America)
output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	12 V
output voltage	
• at output 1 at DC rated value	12 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	10.8 ... 13.2 V
relative overall tolerance of the voltage	1 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.5 %
• on slow fluctuation of ohm loading	0.5 %
voltage peak	
• maximum	120 mV
display version for normal operation	Green LED for 12 V OK
behavior of the output voltage when switching on	Overshoot of Vout < 10 %
response delay maximum	0.5 s

voltage increase time of the output voltage	
• maximum	30 ms
output current	
• rated value	8.5 A
• rated range	0 ... 8.5 A; +50 ... +70 °C: Derating 2.0%/K
supplied active power typical	100 W
bridging of equipment	No
efficiency	
efficiency in percent	87.5 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	14.22 W
closed-loop control	
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	10 %
setting time	
• load step 50 to 100% typical	4 ms
• load step 100 to 50% typical	4 ms
protection and monitoring	
design of the overvoltage protection	< 17.4 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
response value current limitation	9.35 ... 14.88 A
enduring short circuit current RMS value	
• typical	9 A
safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra low output voltage V_{out} according to EN 62368-1
operating resource protection class	Class I
leakage current	
• maximum	0.5 mA
EMC	
standard	
• for emitted interference	EN 55032 Class B
• for mains harmonics limitation	IEC 61000-3-2 Class A
• for interference immunity	EN 55035
standards, specifications, approvals	
certificate of suitability	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus (UL 62368-1, CSA C22.2 NO 62368-1-14), File E151273
• UKCA marking	Yes
• EAC approval	No
• NEC Class 2	No
type of certification	
• BIS	Yes; R-61003204
• CB-certificate	Yes
MTBF at 25 °C	700 000 h; according to SR-332, 100% full load (12 V, 8.5 A), input voltage: 115 V / 230 V AC
standards, specifications, approvals hazardous environments	
certificate of suitability	
• IECEx	No
• ATEX	No
• ULhazloc approval	No
• FM registration	No
standards, specifications, approvals marine classification	
shipbuilding approval	No
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No

<ul style="list-style-type: none"> • French marine classification society (BV) • Det Norske Veritas (DNV) • Lloyds Register of Shipping (LRS) 	No	
	No	
	No	
standards, specifications, approvals Environmental Product Declaration		
Environmental Product Declaration	Yes	
global warming potential [CO2 eq]		
<ul style="list-style-type: none"> • total • during manufacturing • during operation • after end of life 	450.7 kg 5.7 kg 444.8 kg 0.09 kg	
ambient conditions		
ambient temperature		
<ul style="list-style-type: none"> • during operation • during transport • during storage 	-25 ... +70 °C; with natural convection; The device is not recommended to be placed on low thermal conductive surface (e. g. plastics). -40 ... +85 °C -40 ... +85 °C	
relative humidity with condensation according to IEC 60068-2-38 maximum	20 ... 90% without condensation	
connection method		
type of electrical connection	screw terminal	
<ul style="list-style-type: none"> • at input • at output • for auxiliary contacts 	L, N, PE: 1 screw terminal each for 0.75 ... 2 mm ² single-core/finely stranded +, -: 2 screw terminals each for 0.75 ... 2 mm ² -	
mechanical data		
width × height × depth of the enclosure	97 × 30 × 129 mm	
fastening method	Wall mounting	
<ul style="list-style-type: none"> • DIN-rail mounting • S7 rail mounting • wall mounting 	No No Yes	
net weight	0.29 kg	
further information internet links		
internet link		
<ul style="list-style-type: none"> • to website: Industry Mall • to web page: selection aid TIA Selection Tool • to web page: power supplies • to website: CAX-Download-Manager • to website: Industry Online Support 	https://mall.industry.siemens.com https://www.siemens.com/tstcloud https://siemens.com/sitop https://siemens.com/cax https://support.industry.siemens.com	
additional information		
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)	
security information		
security information	<p>Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)</p>	
Classifications		
	Version	Classification

eClass	14	27-04-07-01
eClass	12	27-04-07-01
eClass	9.1	27-04-07-01
eClass	9	27-04-07-01
eClass	8	27-04-90-02
eClass	7.1	27-04-90-02
eClass	6	27-04-90-02
ETIM	10	EC002540
ETIM	9	EC002540
ETIM	8	EC002540
ETIM	7	EC002540
IDEA	4	4130
UNSPSC	15	39-12-10-04

Approvals Certificates

General Product Approval	Environment
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[Manufacturer Declaration](#)



[China RoHS](#)



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