



SITOP PSU8600/1AC/24VDC/20A/4X5A PN

SITOP PSU8600 1AC 20 A/4x5 A PN stabilized power supply input: 100-240 V AC output: 24 V DC/20 A/4x 5 A with PN/IE connection web server integrated OPC UA server integrated

Technical Product Detail Page

<https://i.siemens.com/1P6EP3336-8MB00-2CY0>

input	
type of the power supply network	1-phase and 2-phase AC or DC
supply voltage at AC	
• minimum rated value	100 V
• maximum rated value	240 V
• initial value	85 V
• full-scale value	275 V
supply voltage at DC	110 ... 220 V
input voltage at DC	93 ... 275 V
wide range input	Yes
buffering time for rated value of the output current in the event of power failure minimum	20 ms
operating condition of the mains buffering	at Vin = 100 V; Prioritized supply of Output 1 in case of power failure selectable via DIP switch
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 100 V	5.4 A
• at rated input voltage 110 V	4.8 A
• at rated input voltage 120 V	4.5 A
• at rated input voltage 220 V	2.4 A
• at rated input voltage 230 V	2.5 A
• at rated input voltage 240 V	2.4 A
current limitation of inrush current at 25 °C maximum	15 A
I _{2t} value maximum	4.33 A ² ·s
fuse protection type	internal
fuse protection type in the feeder	required: circuit breaker (for UL: UL489-listed/DIVQ) characteristic C, 10-32 A, alternatively slow-response fuses (for UL: UL248-listed)
output	
voltage curve at output	Controlled, isolated DC voltage
number of outputs	4
output voltage at DC rated value	24 V
output voltage	
• at output 1 at DC rated value	24 V
• at output 2 at DC rated value	24 V
• at output 3 at DC rated value	24 V
• at output 4 at DC rated value	24 V
output voltage adjustable	Yes; via potentiometer or IE/PN interface
adjustable output voltage	4 ... 28 V; Derating > 24 V: 4%/V; max. 120 W per output, max. 480 W overall

	system
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.2 %
• on slow fluctuation of ohm loading	0.1 %
residual ripple	
• maximum	100 mV
voltage peak	
• maximum	200 mV
display version for normal operation	3-color LED for operating state device; LED for operating mode manual/remote; 4 LEDs for communication PROFINET; 3-color LED per output for operating state output; LED green for parallel operation Output 1 and 2 / 3 and 4
type of signal at output	Relay contact (changeover contact, contact current capacity DC 60 V/0.3 A) for "Operating state OK"
behavior of the output voltage when switching on	No overshoot of Vout (soft start)
response delay maximum	1 s; Without on-delay of the outputs
type of outputs connection	Simultaneous connecting-in of all outputs after device booting or delay time of 25 ms, 100 ms or "load-optimized" for sequential cutting-in of the outputs via DIP switches can be set
voltage increase time of the output voltage	
• maximum	500 ms
output current	
• rated value	20 A
• per output	5 A
• at output 1 rated value	5 A
• at output 2 rated value	5 A
• at output 3 rated value	5 A
• at output 4 rated value	5 A
• rated range	0 ... 20 A
supplied active power typical	480 W
parallel switching of outputs	Yes; Parallel circuit Output 1 with 2 or Output 3 with 4 can be selected via DIP switch
bridging of equipment	No
efficiency	
efficiency in percent	92 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	39 W
• during no-load operation maximum	14 W
closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.1 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	0.4 %
setting time	
• maximum	10 ms
protection and monitoring	
design of the overvoltage protection	max. 35 V (max. 500 ms)
property of the output short-circuit proof	Yes
design of short-circuit protection	electronic overload cut-off; optionally constant current operation can be selected for Output 4 via DIP switches
adjustable current response value current of the current-dependent overload release	0.5 ... 5 A
type of response value setting	via potentiometer or IE/PN interface
switching characteristic	
• of the excess current	$I_a > 1.0 \dots < 1.5 \times I_a$ threshold permissible for 5 s; I_a limit ($= 1.5 \times I_a$ threshold) permissible for 200 ms
• of the current limitation	I_a limit ($= 1.5 \times I_a$ threshold) permissible for 5 s, afterwards I_a threshold continuous
overcurrent overload capability	
• in normal operation	Total system overloadable 150% I_a rated to 5 s/min
display version for overload and short circuit	3-color LED for operating state device; 3-color LED per output for operating state output

design of the reset device/resetting mechanism	via sensor per output or IE/PN interface
remote reset function	Non-electrically isolated 24 V input (signal level "high" at > 15 V)
interfaces	
product function communication function	Yes
design of the interface	Ethernet/PROFINET
• design of the interface PROFINET protocol	Yes
protocol is supported	
• OPC UA	Yes
safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra low output voltage V_{out} according to EN 61204-7
operating resource protection class	Class I
leakage current	
• maximum	3.5 mA
protection class IP	IP20
EMC	
standard	
• for emitted interference	EN 55022 Class B
• for mains harmonics limitation	EN 61000-3-2
• for interference immunity	EN 61000-6-2
standards, specifications, approvals	
certificate of suitability	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
• EAC approval	Yes
• NEC Class 2	No
• SEMI F47	Yes
type of certification	
• BIS	Yes; R-41188271
• CB-certificate	Yes
MTBF at 40 °C	186 700 h
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	Yes
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• French marine classification society (BV)	No
• Det Norske Veritas (DNV)	No
• Lloyds Register of Shipping (LRS)	No
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO ₂ eq]	
• total	1 262.5 kg
• during manufacturing	41 kg
• during operation	1 220.3 kg
• after end of life	0.59 kg
ambient conditions	
ambient temperature	
• during operation	-25 ... +60 °C; with natural convection
• during transport	-40 ... +85 °C
• during storage	-40 ... +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
connection method	

type of electrical connection	Plug-in terminals with screwed connection L1+, N/L2/-, PE: Plug-in terminal with 1 screwed connection each for 0.2 ... 4 mm ² single-wire / fine stranded 1, 2, 3, 4: Two plug-in terminals (1, 2 and 3, 4) with 2 screwed connections each for 0.2 ... 2.5 mm ² ; 0 V: Plug-in terminal with 3 screwed connections for 0.2 ... 4 mm ² RST (Reset): Plug-in terminal (together with alarm signal) with 1 screwed connection for 0.2 ... 1.5 mm ² 11, 12, 14 (alarm signal): Plug-in terminal (together with Reset) with 1 screwed connection each for 0.2 ... 1.5 mm ²						
removable terminal at input	Yes						
removable terminal at output	Yes						
design of the interface for communication	PROFINET/Ethernet: two RJ45 sockets (2-port switch)						
suitability for interaction modular system	Yes						
mechanical data							
width x height x depth of the enclosure	125 x 125 x 150 mm						
installation width x mounting height	125 mm x 225 mm						
required spacing							
• top	50 mm						
• bottom	50 mm						
• left	0 mm						
• right	0 mm						
fastening method	Snaps onto DIN rail EN 60715 35x15						
• DIN-rail mounting	Yes						
• S7 rail mounting	No						
• wall mounting	No						
housing can be lined up	Yes						
net weight	2.6 kg						
accessories							
electrical accessories	Expansion modules CNX8600, buffer modules BUF8600, module UPS8600						
mechanical accessories	Device identification label 20 mm x 7 mm, TI-grey 3RT2900-1SB20						
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							
	<table border="1"> <thead> <tr> <th></th><th>Version</th><th>Classification</th></tr> </thead> <tbody> <tr> <td>eClass</td><td>14</td><td>27-04-07-01</td></tr> </tbody> </table>		Version	Classification	eClass	14	27-04-07-01
	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



[Manufacturer Declaration](#)

[Declaration of Conformity](#)



[China RoHS](#)

General Product Approval

Maritime application

Environment

Industrial Communication



[BIS CRS](#)



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