6EP4134-3AB00-0AY0

Data sheet



SITOP UPS1600/DC/24VDC/10A

SITOP UPS1600 10 A uninterruptible power supply input: 24 V DC output: 24 V DC/10 A

supply voltage at DC rated value input voltage at DC adjustable response value voltage for buffer connection preset 21 29 V adjustable response value voltage for buffer connection 21 25 V; Adjustable: 21 V, 21.5 V, 22 V, 22.5 V, 23 V, 24 V, 25 V DC input current at rated input voltage 24 V rated value 14 A, for max. charging current (3 A) memory type of energy storage design of the mains power cut bridging-connection with batteries Adjustable range using rotary cooling switch: 0.5 min, 1 min, 2 min, 5 min, 10 min, 20 min, max. buffering time voltput output output voltage in normal operation at DC rated value in buffering mode at DC rated value voltage increase time of the output voltage typical output voltage in buffering mode at DC output current rated value in normal operation in mortal operation in mortal operation voltage increase time of the output voltage typical on 30 A peak current property of the output short-circuit proof design of short-circuit protection charging current of a rated output voltage for rated value of the output current typical in case of operation on rechargeable battery typical of in case of operation on rechargeable battery typical in case of operation o	input		
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adjustable response value voltage for buffer connection input current at rated input voltage 24 V rated value input current at rated input voltage 24 V rated value the mains power cut bridging-connection design of the mains power cut bridging-connection with batteries design of the mains power cut bridging-connection dijustable range using rotary coding switch: 0.5 min, 1 min, 2 min, 5 min, 10 min, 20 min, max. buffering time output voltage in normal operation at DC rated value in buffering mode at DC rated value in buffering mode at DC rated value in buffering mode at DC rated value in output voltage voltage increase time of the output voltage typical output voltage in buffering mode at DC output current rated value in normal operation in buffering mode in at rated output voltage for rated value of the output current typical in case of operation on rechargeable battery typical in case of operation on rechar	input voltage at DC	21 29 V	
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type of energy storage design of the mains power cut bridging-connection Adjustable range using rotary coding switch: 0.5 min, 1 min, 2 min, 5 min, 10 min, 20 min, max. buffering time output voltage in normal operation at DC rated value in buffering mode at DC rated value in buffering mode at DC rated value voltage increase time of the output voltage typical output voltage in buffering mode at DC output current in normal operation in the fireing mode in normal operation in the fireing mode in buffering mode in normal operation in normal operation in the output short-circuit protection charging current output current in at rated output voltage for rated value of the output current typical in case of operation on rechargeable battery typical	adjustable response value voltage for buffer connection	21 25 V; Adjustable: 21 V, 21.5 V, 22 V, 22.5 V, 23 V, 24 V, 25 V DC	
type of energy storage design of the mains power cut bridging-connection cutput output voltage in normal operation at DC rated value in buffering mode at DC in a approx. 0.2 V startup delay time typical output voltage in buffering mode at DC in a crated value in normal operation in buffering mode in normal operation in buffering mode in a crated value so a crated value of the output short-circuit proof design of short-circuit protection charging current of tade dutput voltage for rated value of the output current typical in case of operation on rechargeable battery typical in case of op	input current at rated input voltage 24 V rated value	14 A; for max. charging current (3 A)	
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formula for output voltage startup delay time typical voltage increase time of the output voltage typical output voltage in buffering mode at DC output current • rated value • in normal operation • in buffering mode • in buffering mode • in buffering mode • output short-circuit proof design of short-circuit protection charging current • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical power loss [W] • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical power loss [W] • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • reverse polarity protection and monitoring product function • reverse polarity protection against energy storage unit Yes	 in normal operation at DC rated value 	24 V	
startup delay time typical voltage increase time of the output voltage typical output voltage in buffering mode at DC output current • rated value • in normal operation • in buffering mode in buffering mode • in buffering mode • in buffering mode peak current property of the output short-circuit proof design of short-circuit protection charging current • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical power loss [W] • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical power loss [W] • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical power loss [W] • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical power loss [W] • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • reverse polarity protection against energy storage unit Yes	in buffering mode at DC rated value	24 V	
voltage increase time of the output voltage typical output voltage in buffering mode at DC output current • rated value • in normal operation • in buffering mode peak current property of the output short-circuit proof design of short-circuit protection charging current • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical power loss [W] • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical	formula for output voltage	Vin - approx. 0.2 V	
output voltage in buffering mode at DC output current • rated value • in normal operation • in buffering mode • in other circuit protection United to a x I rated for 30 ms/min; through-conductivity for 1.5 x I rated for 5 sec/min charging current • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical	startup delay time typical	60 ms	
output current • rated value • in normal operation • in buffering mode • in buffering mode • in buffering mode • in buffering mode • in buffering mode • in buffering mode • in buffering mode • in output short-circuit proof design of short-circuit protection **Limitation to 3 x I rated for 30 ms/min; through-conductivity for 1.5 x I rated for 5 sec/min charging current • 0.1 A, 3 A **Officiency** efficiency in percent • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical • at rated output voltage for rated value of the output current typical • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical	voltage increase time of the output voltage typical	60 ms	
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in normal operation in buffering mode o 30 A peak current 30 A property of the output short-circuit proof design of short-circuit protection charging current o.1 A, 3 A efficiency efficiency efficiency efficiency in case of operation on rechargeable battery typical o in case of operation on rechargeable battery typical	output current		
in buffering mode peak current property of the output short-circuit proof design of short-circuit protection Charging current o.1. A, 3 A	rated value	10 A	
peak current property of the output short-circuit proof design of short-circuit protection charging current other reflection percent at rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated output voltage for rated value of the output current typical other rated for 30 ms/min; through-conductivity for 1.5 x I rated for 30 ms/min; through-conductivity for 1.5 x I rated for 30 ms/min; through-conductivity for 1.5 x I rated for 30 ms/min; through-conductivity for 1.5 x I rated for 30 ms/min; through-conductivity for 1.5 x I rated for 30 ms/min; through-conductivity for 1.5 x I rated for 30 ms/min; through-conductivity for 1.5 x I rated for 30 ms/min; through-conductivity for 1.5 x I rated for 30 ms/min; through-conductivity for 1.5 x I rated for 30 ms/min; through-conductivity for 1.5 x I rated for 30 ms/min; through-condu	 in normal operation 	0 30 A	
property of the output short-circuit proof design of short-circuit protection Limitation to 3 x I rated for 30 ms/min; through-conductivity for 1.5 x I rated for 5 sec/min charging current 0.1 A, 3 A efficiency efficiency in percent • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical • at rated output voltage for rated value of the output current typical • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical supplied active power typical protection and monitoring product function • reverse polarity protection against energy storage unit Yes	in buffering mode	0 30 A	
design of short-circuit protection Limitation to 3 x I rated for 30 ms/min; through-conductivity for 1.5 x I rated for 5 sec/min charging current 0.1 A, 3 A efficiency efficiency in percent at rated output voltage for rated value of the output current typical in case of operation on rechargeable battery typical at rated output voltage for rated value of the output current typical at rated output voltage for rated value of the output current typical in case of operation on rechargeable battery typical in case of operation on rechargeable battery typical supplied active power typical product function reverse polarity protection against energy storage unit Yes	peak current	30 A	
sec/min charging current efficiency efficiency in percent • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical product function • reverse polarity protection against energy storage unit Yes	property of the output short-circuit proof	Yes	
efficiency efficiency in percent • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical • at rated output voltage for rated value of the output current typical • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical • in case of operation on rechargeable battery typical protection and monitoring product function • reverse polarity protection against energy storage unit Yes	design of short-circuit protection		
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current typical • in case of operation on rechargeable battery typical 6 W supplied active power typical 240 W protection and monitoring product function • reverse polarity protection against energy storage unit Yes	power loss [W]		
supplied active power typical protection and monitoring product function • reverse polarity protection against energy storage unit Yes		6 W	
protection and monitoring product function • reverse polarity protection against energy storage unit Yes	• in case of operation on rechargeable battery typical	6 W	
product function • reverse polarity protection against energy storage unit Yes	supplied active power typical	240 W	
• reverse polarity protection against energy storage unit Yes	protection and monitoring		
	product function		
		Yes	

 reverse polarity protection against input voltage polarity reversal 	Yes	
display version		
• for normal operation	Normal operation: LED green (OK), floating changeover contact "Bat/OK" to setting "OK" ("OK" means: Voltage of the supplying power supply unit is greater than cut-in threshold set at the DC UPS module); Lack of buffer standby: LED red (alarm), floating changeover contact "Alarm/Bat" to setting "Alarm"; Battery replacement required: LED red (alarm) flashing with approx. 0.25 Hz; Energy storage > 85%: LED green (Bat > 85%), floating NO contact "Bat > 85" closed; Permissible contact current capacity: DC 60 V/1 A or AC 30 V /1 A	
● in buffering mode	Buffered mode: LED yellow (Bat), floating changeover contact "OK/Bat" to setting "Bat"; Prewarning battery voltage < 20.4 VDC: LED red (alarm), floating changeover contact "Alarm/Bat" to setting "Alarm"; Energy storage > 85%: LED green (Bat > 85%), floating NO contact "Bat > 85" closed	
interfaces		
product component PC interface	No	
product function communication function	Yes	
design of the interface	without	
safety		
galvanic isolation between input and output	No	
	Class III	
operating resource protection class	IP20	
protection class IP	IF20	
standard	TN 55000 Close D	
• for emitted interference	EN 55022 Class B	
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	
CSA approval	Yes; cCSAus (CSA C22.2 No. 62368-1, UL 62368-1)	
UKCA marking	Yes	
EAC approval	Yes	
type of certification CB-certificate	Yes	
MTBF at 40 °C	415 574 h	
standards, specifications, approvals hazardous environments		
certificate of suitability		
• ATEX	No	
 cCSAus, Class 1, Division 2 	No	
standards, specifications, approvals marine classification		
shipbuilding approval	Yes	
Marine classification association		
 American Bureau of Shipping Europe Ltd. (ABS) 	Yes	
 Det Norske Veritas (DNV) 	Yes	
standards, specifications, approvals Environmental Product Dec	claration	
Environmental Product Declaration	Yes	
Global Warming Potential [CO2 eq]		
• total	205.7 kg	
during manufacturing	17.6 kg	
during operation	187.8 kg	
after end of life	0.28 kg	
ambient conditions	0.20 kg	
ambient temperature	25 ±70: with natural convection	
during operationduring transport	-25 +70; with natural convection -40 +85	
	-40 +85	
during storage applicamental entergary according to IEC 60721	Climate class 3K3, 5 95% no condensation	
environmental category according to IEC 60721 connection method	Climate class 3K3, 5 95% no condensation	
type of electrical connection	screw terminal	
• at input	24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG	
• at output	24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG	
 for rechargeable battery module 	24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG	
 for control circuit and status message 	14 screw terminals for 0.2 1.5 mm²/24 16 AWG	

or observed data				
mechanical data width × height × depth of the enclosure	50 × 139 × 125 mm			
installation width × mounting height	50 mm × 239 mm			
	30 Hilli ^ 233 Hilli			
required spacing	50 mm			
• top • bottom	50 mm			
• left	0 mm			
	0 mm			
right fastening method	Snaps onto DIN rail EN 60715 35x7.5/15			
standard rail mounting	Yes			
Standard rail mounting S7 rail mounting	No			
•	No			
wall mounting	Yes			
housing can be lined up				
accessories	net weight 0.38 kg			
electrical accessories	Pattery modula			
further information internet links	Battery module			
internet link	https://www.ii.industry.nicorons			
to website: Industry Mall	https://mall.industry.siemens.com			
to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud			
• to web page: power supplies	https://siemens.com/sitop			
to website: CAx-Download-Manager	https://siemens.com/cax			
to website: Industry Online Support	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	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)			

Classifications

	Version	Classification
eClass	14	27-04-07-05
eClass	12	27-04-07-05
eClass	9.1	27-04-07-05
eClass	9	27-04-07-05
eClass	8	27-04-06-90
eClass	7.1	27-04-06-90
eClass	6	27-04-06-90
ETIM	9	EC000382
ETIM	8	EC000382
ETIM	7	EC000382
IDEA	4	4149
UNSPSC	15	39-12-10-11

Approvals Certificates

General Product Approval







Manufacturer Declaration Declaration of Conformity



General Product Approval

Marine / Shipping

Environment













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11/25/2024