Data sheet

SITOP UPS1600 24 V DC/10 A, USB SITOP UPS1600 10 A USB Uninterrupted Power supply with USB interface input: 24 V DC output: DC 24 V/10 A



Input	
supply voltage at DC rated value	24 V
voltage curve at input	DC
input voltage range	21 29 V DC
adjustable response value voltage for buffer connection preset	21.5 V
adjustable response value voltage for buffer	21 25 V; Adjustable: 21 V, 21.5 V, 22 V, 22.5 V, 23 V, 24 V, 25
connection	V DC or via software
input current at rated input voltage 24 V rated value	14 A; for max. charging current (3 A)

Mains buffering	
type of energy storage	with batteries
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 or via software
charging current	0.1 A, 3 A
adjustable charging current maximum note	Automatically depending on battery module

Output	
output voltage	
 in normal operation at DC rated value 	24 V
• in buffering mode at DC rated value	24 V

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formula for output voltage	Vin - approx. 0.2 V
ON-delay time typical	60 s
voltage increase time of the output voltage typical	60 ms
output voltage in buffering mode at DC	18.5 27 V
output current	
• rated value	10 A
• in normal operation	0 30 A
• in buffering mode	0 30 A
peak current	30 A
property of the output short-circuit proof	Yes
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
supplied active power typical	240 W

Efficiency	
efficiency in percent	
 at rated output current for rated value of the output current typical 	97.5 %
• in case of accumulator operation typical	97.5 %
power loss [W]	
 at rated output current for rated value of the output current typical 	6 W
 in case of accumulator operation typical 	6 W

Protection and monitoring

product function

• reverse polarity protection against energy storage unit polarity reversal

• reverse polarity protection against input voltage polarity reversal

Yes

Yes

Signaling

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, floating changeover contact "Alarm/Bat" switching 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

product component PC interface	Yes
design of the interface	USB
Safety	
galvanic isolation between entrance and outlet	No
operating resource protection class	Class III
certificate of suitability	
• CE marking	Yes
as approval for USA	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
● relating to ATEX	IECEx Ex nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4 Gc; cULus Class I, Div. 2 (ANSI/ISA-12.12.01-2015, CSA C22.2 No. 213-15) Group ABCD, T4; cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T4
• C-Tick	Yes
type of certification CB-certificate	Yes
shipbuilding approval	ABS, DNV GL
protection class IP	IP20
EMC	
standard	
• for emitted interference	EN 55022 Class B
• for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
 during operation 	-25 +70 °C; with natural convection
during transport	-40 +85 °C
during storage	-40 +85 °C
environmental category acc. to IEC 60721	Climate class 3K3, 5 95% no condensation
Mechanics	
type of electrical connection	screw-type terminals
• 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 battery module	24 V DC: 2 screw terminals for 0.2 6 mm²/24 13 AWG



• for control circuit and status message

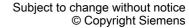
width of the enclosure

height of the enclosure

depth of the enclosure

required spacing

6EP4134-3AB00-1AY0



50 mm

139 mm

125 mm

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14 screw terminals for 0.2 ... 1.5 mm²/24 ... 16 AWG

• top	50 mm
• bottom	50 mm
• left	0 mm
• right	0 mm
net weight	0.4 kg
product feature of the enclosure housing for side-by- side mounting	Yes
mounting type	Snaps onto DIN rail EN 60715 35x7.5/15
electrical accessories	Battery module
MTBF at 40 °C	364 153 h
reference code acc. to DIN EN 81346-2	Т
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

