## **SIEMENS**

Data sheet 6EP1933-2EC51



## SITOP UPS500S/DC/24VDC/15A/5KWS

SITOP UPS500S Maintenance free uninterruptible power supply with USB interface basic device 5 kWs input: 24 V DC output: 24 V DC/15 A degree of protection IP20 \*Ex approval no longer available\*

Input	
supply voltage at DC rated value	24 V
voltage curve at input	DC
input voltage range	22 29 V DC
adjustable response value voltage for buffer connection preset	22.5 V
adjustable response value voltage for buffer connection	22 25.5 V; Adjustable in 0.5 V increments
input current at rated input voltage 24 V rated value	15.2 A; + approx. 2.3 A with empty energy storage (capacitor)
Mains buffering	
type of energy storage	with capacitors
design of the mains power cut bridging-connection	15 A for 9 s or 10 A for 15 s or 5 A for 31 s or 2 A for 76 s; longer buffering times with expansion modules
energy content of energy storage	5 kW.s
charging current	1 A, 2 A
adjustable charging current maximum note	factory setting approx. 1 A
Output	
output voltage	
<ul> <li>in normal operation at DC rated value</li> </ul>	24 V
<ul> <li>in buffering mode at DC rated value</li> </ul>	24 V
formula for output voltage	24 V ± 3 %
startup delay time typical	0.6 s
voltage increase time of the output voltage typical	25 ms
output voltage in buffering mode at DC	24 24.7 V
output current	
rated value	15 A
<ul><li>in normal operation</li></ul>	0 15 A
in buffering mode	0 15 A
peak current	25 A
property of the output short-circuit proof	Yes
supplied active power typical	360 W
Efficiency	
efficiency in percent	
at rated output voltage for rated value of the output current typical	97.5 %
power loss [W]	
<ul> <li>at rated output voltage for rated value of the output current typical</li> </ul>	9 W
Protection and monitoring	
product function	
<ul> <li>reverse polarity protection against energy storage</li> </ul>	Yes

unit polarity reversal	
reverse polarity protection against input voltage	Yes
polarity reversal	
Signaling	
display version	
<ul><li>for normal operation</li><li>in buffering mode</li></ul>	Normal operation: LED green (OK), floating changeover contact "OK/Bat" 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"; 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  Buffered mode: LED yellow (BAT), floating changeover contact "OK/BAT" to setting "BAT"; Prewarning buffer end after expiry of 80% of the available buffer time: LED red (ALARM), floating changeover contact "ALARM/BAT" to setting "ALARM"; Energy storage > 85%: LED green (BAT > 85%), floating NO contact "BAT > 85" closed
Interface	,, ,
product component PC interface	Yes
design of the interface	USB
Safety	
	No
galvanic isolation between input and output	Class III
operating resource protection class	IP20
protection class IP	IP20
Approvals	
certificate of suitability	
CE marking	Yes
<ul> <li>as approval for USA</li> </ul>	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus
O Tiels	(CSA C22.2 No. 60950-1, UL 60950-1)
• C-Tick	Yes
shipbuilding approval	ABS, DNV GL
EMC	
standard	
<ul> <li>for emitted interference</li> </ul>	EN 55022 Class B
for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	0 60 °C; with natural convection
<ul> <li>during transport</li> </ul>	-40 +70 °C
<ul><li>during storage</li></ul>	-40 +70 °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 1 4 mm²/17 11 AWG
at output	24 V DC: 4 screw terminals for 1 4 mm <sup>2</sup> /17 11 AWG
for rechargeable battery module	-
for control circuit and status message	10 screw terminals for 0.5 2.5 mm²/20 13 AWG
width of the enclosure	120 mm
height of the enclosure	125 mm
depth of the enclosure	125 mm
required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm
• right	0 mm
net weight	1 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
electrical accessories	Extension module SITOP UPS501S
MTBF at 40 °C	459 137 h
reference code acc. to IEC 81346-2	T
other information	
omer imornation	Specifications at rated input voltage and ambient temperature +25 °C

(unless otherwise specified)

