



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

SITOP UPS500S Maintenance free uninterruptible power supply with USB interface basic device 5 kW 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	
• in normal operation at DC rated value	24 V
• in buffering mode at DC rated value	24 V
formula for output voltage	$24 \text{ V} \pm 3 \%$
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
• in normal operation	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]	
• at rated output voltage for rated value of the output current typical	9 W
Protection and monitoring	
product function	
• reverse polarity protection against energy storage unit polarity reversal	Yes
• reverse polarity protection against input voltage polarity	Yes

reversal	
Signaling	
display version	
<ul style="list-style-type: none"> for normal operation 	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
<ul style="list-style-type: none"> in buffering mode 	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	
galvanic isolation between input and output	No
operating resource protection class	Class III
protection class IP	IP20
Approvals	
certificate of suitability	
<ul style="list-style-type: none"> CE marking 	Yes
<ul style="list-style-type: none"> UL approval 	Yes
<ul style="list-style-type: none"> as approval for USA 	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
certificate of suitability	
<ul style="list-style-type: none"> EAC approval 	Yes
<ul style="list-style-type: none"> C-Tick 	Yes
<ul style="list-style-type: none"> shipbuilding approval 	Yes
shipbuilding approval	ABS, DNV GL
Marine classification association	
<ul style="list-style-type: none"> American Bureau of Shipping Europe Ltd. (ABS) 	Yes
<ul style="list-style-type: none"> DNV GL 	Yes
EMC	
standard	
<ul style="list-style-type: none"> for emitted interference 	EN 55022 Class B
<ul style="list-style-type: none"> for interference immunity 	EN 61000-6-2
environmental conditions	
ambient temperature	
<ul style="list-style-type: none"> during operation 	0 ... 60 °C; with natural convection
<ul style="list-style-type: none"> during transport 	-40 ... +70 °C
<ul style="list-style-type: none"> during storage 	-40 ... +70 °C
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
Mechanics	
type of electrical connection	screw-type terminals
<ul style="list-style-type: none"> at input 	24 V DC: 2 screw terminals for 1 ... 4 mm²/17 ... 11 AWG
<ul style="list-style-type: none"> at output 	24 V DC: 4 screw terminals for 1 ... 4 mm²/17 ... 11 AWG
<ul style="list-style-type: none"> for rechargeable battery module 	-
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> top 	50 mm
<ul style="list-style-type: none"> bottom 	50 mm
<ul style="list-style-type: none"> left 	0 mm
<ul style="list-style-type: none"> 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 according to IEC 81346-2	RB
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

