

SITOP UPS500S BASIC UNIT 2.5 KWS
 SITOP UPS500S Maintenance free Uninterruptible Power supply
 With USB interface Basic device 2.5 kW input: 24 V DC output: DC
 24 V/15 A Degree of protection IP20



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 3 s or 10 A for 6 s or 5 A for 15 s or 2 A for 38 s; longer buffering times with expansion modules
energy content of energy storage	2.5 kW.s
charging current	1 A, 2 A
adjustable charging current maximum note	factory setting approx. 1 A
Output	
output voltage	24 V
<ul style="list-style-type: none"> in normal operation at DC rated value 	

<ul style="list-style-type: none"> • in buffering mode at DC rated value 	24 V
formula for output voltage	24 V ± 3 %
ON-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	
<ul style="list-style-type: none"> • rated value 	15 A
<ul style="list-style-type: none"> • in normal operation 	0 ... 15 A
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • at rated output current for rated value of the output current typical 	97.5 %
power loss [W]	
<ul style="list-style-type: none"> • at rated output current for rated value of the output current typical 	9 W

Protection and monitoring

product function	
<ul style="list-style-type: none"> • reverse polarity protection against energy storage unit polarity reversal 	Yes
<ul style="list-style-type: none"> • reverse polarity protection against input voltage polarity reversal 	Yes

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 entrance and outlet	No
operating resource protection class	Class III
certificate of suitability <ul style="list-style-type: none"> • CE marking • as approval for USA • relating to ATEX • C-Tick 	Yes cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) - Yes
shipbuilding approval	ABS, DNV GL
protection class IP	IP20

EMC	
standard <ul style="list-style-type: none"> • for emitted interference • for interference immunity 	EN 55022 Class B EN 61000-6-2

environmental conditions	
ambient temperature <ul style="list-style-type: none"> • during operation • during transport • during storage 	0 ... 60 °C; with natural convection -40 ... +70 °C -40 ... +70 °C
environmental category acc. to IEC 60721	Climate class 3K3, 5 ... 95% no condensation

Mechanics	
type of electrical connection <ul style="list-style-type: none"> • at input • at output • for battery module • for control circuit and status message 	screw-type terminals 24 V DC: 2 screw terminals for 1 ... 4 mm ² /17 ... 11 AWG 24 V DC: 4 screw terminals for 1 ... 4 mm ² /17 ... 11 AWG - 10 screw terminals for 0.5 ... 2.5 mm ² /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 • bottom • left • right 	50 mm 50 mm 0 mm 0 mm
net weight	1 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	Extension module SITOP UPS501S
MTBF at 40 °C	638 570 h

reference code acc. to DIN EN 81346-2	T
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)