

SITOP DC UPS MODULE 15A WITH USB INTERF.  
 SITOP DC-USV Module 24 V/15 A Uninterrupted Power supply With  
 USB interface input: DC 24 V/16 A output: DC 24 V/15 A



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 A; + approx. 1 A with empty battery
Mains buffering	
Type of energy storage	with batteries
Design of the mains power cut bridging-connection	Dependent on connected battery and load current, see selection table battery module and mains buffering times as well as the relevant important information notes!
Charging current	0.35 A, 0.7 A
adjustable charging current maximum Note	factory setting approx. 0.7 A
Output	
Output voltage	
<ul style="list-style-type: none"> <li>in normal operation at DC Rated value</li> </ul>	24 V

<ul style="list-style-type: none"> <li>• in buffering mode at DC Rated value</li> </ul>	24 V
Formula for output voltage	$V_{in} - \text{approx. } 0.5 \text{ V}$
ON-delay time typical	1 s
Voltage increase time of the output voltage typical	60 ms
Output voltage in buffering mode at DC	19 ... 28.5 V
Output current	
<ul style="list-style-type: none"> <li>• Rated value</li> </ul>	15 A
<ul style="list-style-type: none"> <li>• in normal operation</li> </ul>	0 ... 15 A
<ul style="list-style-type: none"> <li>• in buffering mode</li> </ul>	0 ... 15 A
Peak current	15.7 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"> <li>• at rated output current for rated value of the output current typical</li> </ul>	96.2 %
<ul style="list-style-type: none"> <li>• in case of accumulator operation typical</li> </ul>	96 %
Power loss [W]	
<ul style="list-style-type: none"> <li>• at rated output current for rated value of the output current typical</li> </ul>	14 W
<ul style="list-style-type: none"> <li>• in case of accumulator operation typical</li> </ul>	15 W

### Protection and monitoring

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

### Signaling

Display version	
<ul style="list-style-type: none"> <li>• for normal operation</li> </ul>	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
<ul style="list-style-type: none"> <li>• in buffering mode</li> </ul>	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

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"> <li>• CE marking</li> <li>• as approval for USA</li> <li>• relating to ATEX</li> <li>• C-Tick</li> </ul>	Yes cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 - No
Shipbuilding approval	ABS, DNV GL
Protection class IP	IP20
EMC	
Standard <ul style="list-style-type: none"> <li>• for emitted interference</li> <li>• for interference immunity</li> </ul>	EN 55022 Class B EN 61000-6-2
environmental conditions	
Ambient temperature <ul style="list-style-type: none"> <li>• during operation</li> <li>• during transport</li> <li>• during storage</li> </ul>	-25 ... +60 °C; with natural convection -40 ... +85 °C -40 ... +85 °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"> <li>• at input</li> <li>• at output</li> <li>• for battery module</li> <li>• for control circuit and status message</li> </ul>	screw-type terminals 24 V DC: 2 screw terminals for 1 ... 4 mm <sup>2</sup> /17 ... 11 AWG 24 V DC: 4 screw terminals for 1 ... 4 mm <sup>2</sup> /17 ... 11 AWG 24 V DC: 2 screw terminals for 1 ... 4 mm <sup>2</sup> /17 ... 11 AWG 10 screw terminals for 0.5 ... 2.5 mm <sup>2</sup> /20 ... 13 AWG
Width of the enclosure	50 mm
Height of the enclosure	125 mm
Depth of the enclosure	125 mm
Required spacing <ul style="list-style-type: none"> <li>• top</li> <li>• bottom</li> <li>• left</li> <li>• right</li> </ul>	50 mm 50 mm 0 mm 0 mm
Net weight	0.45 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	690 131 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)