

SITOP DC UPS MODULE 40A WITH USB INTERF.  
 SITOP Module 24 V DC USV/40 A Uninterrupted Power supply With  
 USB interface input: 24 V DC/42.6 A output: 24 V DC/40 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	40 A; + approx. 2.6 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	1 A, 2 A
adjustable charging current maximum Note	factory setting approx. 2 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	360 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>	40 A
<ul style="list-style-type: none"> <li>• in normal operation</li> </ul>	0 ... 40 A
<ul style="list-style-type: none"> <li>• in buffering mode</li> </ul>	0 ... 40 A
Peak current	42 A
Supplied active power typical	960 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>	97.2 %
<ul style="list-style-type: none"> <li>• in case of accumulator operation typical</li> </ul>	96.9 %
Power loss [W]	
<ul style="list-style-type: none"> <li>• at rated output current for rated value of the output current typical</li> </ul>	28.6 W
<ul style="list-style-type: none"> <li>• in case of accumulator operation typical</li> </ul>	33.6 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
<b>Safety</b>	
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
<b>EMC</b>	
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
<b>Operating data</b>	
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, no condensation
<b>Mechanics</b>	
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 0.33 ... 10 mm <sup>2</sup> /22 ... 7 AWG 24 V DC: 2 screw terminals for 0.33 ... 10 mm <sup>2</sup> /22 ... 7 AWG 24 V DC: 2 screw terminals for 0.33 ... 10 mm <sup>2</sup> /22 ... 7 AWG 10 screw terminals for 0.5 ... 2.5 mm <sup>2</sup> /20 ... 13 AWG
Width of the enclosure	102 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	1.1 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	Battery module

MTBF at 40 °C	493 340 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)