



SITOP BAT1600/Battery module/24V/12AH

SITOP BAT1600 24 V DC 12 Ah Pb battery module with maintenance-free closed lead-acid battery for SITOP UPS1600

### electrical data

end-of-charge voltage at DC	
<ul style="list-style-type: none"> <li>at -10 °C recommended</li> <li>at 0 °C recommended</li> <li>at 10 °C recommended</li> <li>at 20 °C recommended</li> <li>at 30 °C recommended</li> <li>at 40 °C recommended</li> <li>at 50 °C recommended</li> </ul>	<ul style="list-style-type: none"> <li>28 V</li> <li>28 V</li> <li>27.8 V</li> <li>27.3 V</li> <li>26.8 V</li> <li>26.6 V</li> <li>26.3 V</li> </ul>

### output

battery capacity	12 A·h
output current rated value	40 A
output current in buffering mode maximum	40 A
peak current	120 A; for 30 ms
charging current maximum	3 A
output voltage at DC rated value	24 V

### interfaces

communication function	Yes
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### protection and monitoring

design of short-circuit protection	50A / 32V Maxi flat fuse
design of the overload protection	Valve control
display version for normal operation	Three-color: green = Buffer ready; yellow = Buffer endangered; red = Buffer not possible

### safety

operating resource protection class	Class III
protection class IP	IP20

### standards, specifications, approvals

certificate of suitability	
<ul style="list-style-type: none"> <li>CE marking</li> <li>UL approval</li> <li>CSA approval</li> <li>UKCA marking</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes; cULus-Listed (UL 61010-1, UL61010-2-201 , CSA C22.2 No. 61010-1, CSA C22.2 NO 61010-2-201), File E143289</li> <li>Yes; cCSAus (CSA C22.2 No. 62368-1, UL 62368-1)</li> <li>Yes</li> </ul>
type of certification CB-certificate	Yes

### standards, specifications, approvals hazardous environments

certificate of suitability	
<ul style="list-style-type: none"> <li>ATEX</li> <li>cCSAus, Class 1, Division 2</li> </ul>	<ul style="list-style-type: none"> <li>No</li> <li>No</li> </ul>

### standards, specifications, approvals marine classification

shipbuilding approval	Yes
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Marine classification association	
<ul style="list-style-type: none"> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> <li>Det Norske Veritas (DNV)</li> </ul>	Yes in preparation
<b>standards, specifications, approvals Environmental Product Declaration</b>	
Environmental Product Declaration	Yes
global warming potential [CO <sub>2</sub> eq]	
<ul style="list-style-type: none"> <li>total</li> <li>during manufacturing</li> <li>during operation</li> <li>after end of life</li> </ul>	44.7 kg 22.2 kg 18.4 kg 1.4 kg
<b>ambient conditions</b>	
ambient condition	For storage, mounting and operation of lead-acid batteries, the relevant DIN/VDE regulations or country-specific regulations (e.g. VDE 0510 Part 2/EN 50272-2) must be observed. You must ensure that the battery site is sufficiently ventilated. Possible sources of ignition must be at least 50 cm away.
ambient temperature	
<ul style="list-style-type: none"> <li>during operation</li> <li>during transport</li> <li>during storage</li> </ul>	-15 ... +50 -20 ... +50 -20 ... +40
relative temporary capacity loss at 20 °C in a month typical	3 %
<b>service life</b>	
service life of energy storage	
<ul style="list-style-type: none"> <li>typical</li> <li>at 20 °C typical</li> <li>at 30 °C typical</li> <li>at 40 °C typical</li> <li>at 50 °C typical</li> </ul>	capacity falls to 80 % of original capacity (according to EUROBAT) 4 a 2 a 1 a 0.5 a
note	Along with the storage and operating temperature, other factors such as the duration of the storage period and the charge status during storage have a decisive influence on the possible useful life. Batteries should therefore be stored as briefly as possible, always fully charged, and within the temperature range 0 to +20 °C.
<b>connection method</b>	
type of electrical connection	screw terminal
<ul style="list-style-type: none"> <li>for UPS module</li> <li>for control circuit and status message</li> </ul>	1 screw terminal each for 0.5 ... 16 mm <sup>2</sup> for + BAT and - BAT 1 screw terminal each for 0.2 ... 2.5 mm <sup>2</sup>
<b>mechanical data</b>	
width × height × depth of the enclosure	225 × 156 × 138 mm
installation width × mounting height	225 mm × 256 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
fastening method	Wall mounting
<ul style="list-style-type: none"> <li>standard rail mounting</li> <li>S7 rail mounting</li> <li>wall mounting</li> </ul>	No No Yes
net weight	10.2 kg
number of cells	2
<b>accessories</b>	
product component included	2x Maxi Fuse 50 A/32 V
<b>further information internet links</b>	
internet link	
<ul style="list-style-type: none"> <li>to website: Industry Mall</li> <li>to web page: selection aid TIA Selection Tool</li> <li>to web page: power supplies</li> <li>to website: CAx-Download-Manager</li> <li>to website: Industry Online Support</li> </ul>	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a> <a href="https://siemens.com/sitop">https://siemens.com/sitop</a> <a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>additional information</b>	
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

**security information**

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**Classifications**

	Version	Classification
eClass	14	27-05-04-03
eClass	12	27-05-04-03
eClass	9.1	27-05-04-03
eClass	9	27-05-04-03
eClass	8	27-05-04-03
eClass	7.1	27-05-04-03
eClass	6	27-05-04-90
ETIM	9	EC000357
ETIM	8	EC000357
ETIM	7	EC000357

**Approvals Certificates**

General Product Approval



[Manufacturer Declaration](#)



Dangerous goods

Environment

[Dangerous goods information](#)



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