



SITOP BAT1600/Battery module/24V/12AH/EX

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

General information	
Technical Product Detail Page	<a href="https://i.siemens.com/1P6EP4135-0GL00-0AY0">https://i.siemens.com/1P6EP4135-0GL00-0AY0</a>
electrical data	
end-of-charge voltage at DC	
• at -10 °C recommended	28 V
• at 0 °C recommended	28 V
• at 10 °C recommended	27.8 V
• at 20 °C recommended	27.3 V
• at 30 °C recommended	26.8 V
• at 40 °C recommended	26.6 V
• at 50 °C recommended	26.3 V
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
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	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 61010-1, UL61010-2-201 , CSA C22.2 No. 61010-1, CSA C22.2 NO 61010-2-201), File E143289
• UKCA marking	Yes
type of certification CB-certificate	Yes
standards, specifications, approvals hazardous environments	
certificate of suitability	
• IECEx	Yes; IECEx Ex ec IIC T4 Gc
• ATEX	Yes; ATEX (EX) II 3G ex ec IIC T4 Gc

<ul style="list-style-type: none"> <li>• ULhazloc approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• CCC for hazardous zone according to GB standard</li> </ul>	Yes
<b>standards, specifications, approvals marine classification</b>	
shipbuilding approval	Yes
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 [CO2 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>	40.18 kg 22.2 kg 14 kg 1.17 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 °C -20 ... +50 °C -20 ... +40 °C
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>• DIN-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> </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>

- to web page: power supplies
- to website: CAx-Download-Manager
- to website: Industry Online Support

<https://siemens.com/sitop>  
<https://www.siemens.com/cax>  
<https://support.industry.siemens.com>

#### additional information

other information

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

#### security information

security information

Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement - and continuously maintain - a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit [www.siemens.com/cybersecurity-industry](http://www.siemens.com/cybersecurity-industry). Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <https://www.siemens.com/cert>. (V4.7)

#### 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	10	EC000357
ETIM	9	EC000357
ETIM	8	EC000357
ETIM	7	EC000357

#### Approvals Certificates

General Product Approval

For use in hazardous locations



[Manufacturer Declaration](#)



EG-Konf.



UL



IECEX

For use in hazardous locations

Dangerous goods

[Miscellaneous](#)



ATEX

[CCC-Ex](#)



UL

[Dangerous goods information](#)

[Dangerous goods information](#)

#### Environment



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