## **SIEMENS**

## **Data sheet**

electrical data

6EP4134-0JA00-0AY0



SITOP BAT1600 24 V DC 7.5 Ah LiFePO4 lithium battery for SITOP UPS1600  $^{\star\star\star}$  not for air freight  $^{\star\star\star}$ 



possible  safety  operating resource protection class  Class III  protection class IP  standards, specifications, approvals  certificate of suitability  • CE marking  • UL approval  • UL approval  • CSA c22.2 NO 61010-2-201, File E143289; cCSAus (CSA 62368-1, ULC)  1)  • CSA approval  Yes; cULus-Listed (UL 61010-1, UL61010-2-201, CSA C22.2 No. 61010-1)  Yes; cULus-Listed (UL 61010-1, UL61010-2-201, CSA C22.2 No. 61010-1)	electifical data		
at 0 °C recommended at 10 °C recommended at 28.8 V at 10 °C recommended 28.8 V at 20 °C recommended 28.8 V at 30 °C recommended 28.8 V at 40 °C recommended 28.8 V at 40 °C recommended 28.8 V  at 50 °C recommended 28.8 V  battery capacity  7.5 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 display version for normal operation  safety  operating resource protection class protection class IP protection class IP  standards, specifications, approvals certificate of suitability • CE marking • Ves cULus-Listed (UL 61010-1, UL61010-2-201, File E143289; cCSAus (CSA 62368-1, ULi 1) type of certificate of suitability • CSA approval  eCSA approval Ves standards, specifications, approvals hazardous environments certificate of suitability • CSA specifications, approvals hazardous environments certificate of suitability • CSA specifications, approvals hazardous environments certificate of suitability • ATEX • cCSAus, Class 1, Division 2	end-of-charge voltage at DC		
at 10 °C recommended at 28.8 V at 20 °C recommended 28.8 V at 30 °C recommended 28.8 V at 40 °C recommended 28.8 V  at 40 °C recommended 28.8 V  at 50 °C recommended 28.8 V  battery capacity 7.5 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 display version for normal operation  safety operating resource protection class protection class   IP20  standards, specifications, approvals  certificate of suitability • CE marking • UL approval • CSA approval • CSA approval  certificate of Services  vers	• at -10 °C recommended	28.8 V	
at 20 °C recommended at 30 °C recommended 28.8 V at 40 °C recommended 28.8 V  at 40 °C recommended 28.8 V  at 60 °C recommended 28.8 V  cutput  battery capacity 7.5 A·h cutput current rated value 0 utput current in buffering mode maximum 40 A peak current 120 A; for 30 ms charging current maximum 3 A cutput votage at DC rated value 24 V interfaces communication function Yes  protection and monitoring design of short-circuit protection display version for normal operation  Three-color: green = Buffer ready; yellow = Buffer endangered; red = Bufpossible  safety  operating resource protection class protection class IP iP20  standards, specifications, approvals  certificate of suitability • CE marking • UL approval • CSA approval  CSA C22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, ULI 1) type of certification CB-certificate Yes  standards, specifications, approvals hazardous environments certificate of suitability • CSA specifications, approvals hazardous environments certificate of suitability • CSA specifications, approvals hazardous environments certificate of Suitability • CSA c22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, ULI 1) type of certification CB-certificate Yes  standards, specifications, approvals hazardous environments certificate of suitability • ATEX • cCSAus, Class 1, Division 2	• at 0 °C recommended	28.8 V	
at 30 °C recommended at 50 °C recommended at 50 °C recommended at 50 °C recommended at 50 °C recommended  battery capacity  output  battery capacity  output current rated value  output current in buffering mode maximum  40 A  peak current 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 display version for normal operation  safety  operating resource protection class  protection class IP  standards, specifications, approvals  certificate of suitability  • CSA approval  • CSA approval  tertificate  yes  standards, specifications, approvals hazardous environments  certificate of suitability  • CSA approval  ATEX  • cCSAus, Class 1, Division 2  No	• at 10 °C recommended	28.8 V	
at 40 °C recommended at 50 °C recommended 28.8 V  battery capacity 7.5 A-h output current rated value output current in buffering mode maximum 40 A output current in buffering mode maximum 40 A output voltage at DC rated value 24 V  interfaces  communication function  Protection and monitoring design of short-circuit protection display version for normal operation  atforty  operating resource protection class protection aclass IP  standards, specifications, approvals  CE marking  UL approval  CSA approval  Pes  standards, specification CB-certificate Yes  standards, specifications. approvals hazardous environments certificate of Suitability  ATEX  o CSAus, Class 1, Division 2  No	• at 20 °C recommended	28.8 V	
• at 50 °C recommended  output  battery capacity  output current rated value  output current rated value  output current in buffering mode maximum  peak current  120 A; for 30 ms  charging current maximum  output voltage at DC rated value  24 V  interfaces  communication function  Yes  protection and monitoring  design of short-circuit protection  display version for normal operation  safety  operating resource protection class  protection class IP  standards, specifications, approvals  CEM arking  • UL approval  • CSA approval  CSA C22.2 NO 61010-2-2011, File E143289; cCSAus (CSA 62368-1, ULI)  type of certificate of suitability  • CSA periodications, approvals hazardous environments  certificate of suitability  • ATEX  • cCSAus, Class 1, Division 2	• at 30 °C recommended	28.8 V	
battery capacity  battery capacity  output current rated value  output current in buffering mode maximum  peak current  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  display version for normal operation  safety  operating resource protection class  certificate of suitability  • CES marking  • UL approval  CSA c22.2 NO 61010-2-2011, File E143289; cCSAus (CSA 62368-1, ULI 1)  type of certification CB-certificate  yes  standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • cCSAus, Class 1, Division 2  No	• at 40 °C recommended	28.8 V	
battery capacity  output current rated value  output current in buffering mode maximum  peak current  120 A; for 30 ms  charging current maximum  3 A  output voltage at DC rated value  24 V  interfaces  communication function  protection and monitoring  design of short-circuit protection  display version for normal operation  safety  operating resource protection class  protection class IP  standards, specifications, approvals  certificate of suitability  • CSA approval  CSA C22.2 No 61010-2-201, File E143289; cCSAus (CSA 62368-1, ULI 1)  type of certification CB-certificate  yes  standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • cCSAus, Class 1, Division 2	• at 50 °C recommended	28.8 V	
output current rated value  output current in buffering mode maximum  peak current  120 A; for 30 ms  charging current maximum  output voltage at DC rated value  interfaces  communication function  yes  protection and monitoring  design of short-circuit protection  display version for normal operation  Three-color: green = Buffer ready; yellow = Buffer endangered; red = Bufpossible  protection class IP  standards, specifications, approvals  certificate of suitability  • CE marking  • UL approval  • CSA approval  • CSA approval  CSA C22.2 NO 61010-2-201), File E143289; CCSAus (CSA 62368-1, ULf)  type of certification CB-certificate  standards, specifications, approvals hazardous environments  certificate of suitability  • CSA C32.2 NO 61010-2-201), File E143289; CCSAus (CSA 62368-1, ULf)  type of certification CB-certificate  standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • ATEX  • CCSAus, Class 1, Division 2	output		
output current in buffering mode maximum  peak current  120 A; for 30 ms  charging current maximum  3 A  output voltage at DC rated value  24 V  interfaces  communication function  protection and monitoring  design of short-circuit protection  display version for normal operation  safety  operating resource protection class  protection class IP  standards, specifications, approvals  certificate of suitability  • CSA approval  CSA c22.2 No 61010-2-201, File E143289; cCSAus (GSA 62368-1, ULI 1)  type of certification CB-certificate  standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • cCSAus, Class 1, Division 2  120 A; for 30 ms  121 Av  120 A; for 30 ms  120 Av  120 A; for 30 ms  120 Av  120 Av  120 A; for 30 ms  120 Av  1	battery capacity	7.5 A·h	
peak current charging current maximum 3 A output voltage at DC rated value 24 V interfaces communication function Protection and monitoring design of short-circuit protection display version for normal operation  safety operating resource protection class protection class IP standards, specifications, approvals certificate of suitability  • CE marking • UL approval • CSA approval  • CSA approval  • CSA approval  • CSA approval  • CSA approval  type of certification CB-certificate  standards, specifications, approvals hazardous environments certificate of suitability  • CSA c22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, ULI 1)  type of certification CB-certificate  standards, specifications, approvals hazardous environments certificate of suitability  • ATEX • CCSAus, Class 1, Division 2	output current rated value	40 A	
charging current maximum  output voltage at DC rated value  24 V  interfaces  communication function  protection and monitoring  design of short-circuit protection  display version for normal operation  safety  operating resource protection class protection class IP  standards, specifications, approvals  certificate of suitability  • CSA approval  CSA C22.2 NO 61010-2-201, File E143289; cCSAus (CSA 62368-1, ULi 1)  type of certification CB-certificate  standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • cCSAus, Class 1, Division 2  A SA A 22 V Maxi flat fuse  50A / 32V Maxi flat fuse  150A / 32V Maxi flat fuse  150	output current in buffering mode maximum	40 A	
output voltage at DC rated value  interfaces  communication function  protection and monitoring  design of short-circuit protection  display version for normal operation  safety  operating resource protection class  protection class IP  standards, specifications, approvals  certificate of suitability  • CSA approval  CSA C22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, ULt 1)  type of certification CB-certificate  standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • cCSAus, Class 1, Division 2  Ves  communication function  Yes  50A / 32V Maxi flat fuse  50A / 32V Maxi flat fuse  50A / 32V Maxi flat fuse  Three-color: green = Buffer ready; yellow = Buffer endangered; red = Buf possible  Suffer endangered; red = Buf possible  50A / 32V Maxi flat fuse  50A / 32V	peak current	120 A; for 30 ms	
interfaces  communication function  protection and monitoring  design of short-circuit protection  display version for normal operation  safety  operating resource protection class protection class IP  standards, specifications, approvals  certificate of suitability  • CE marking  • UL approval  • CSA approval  • CSA approval  type of certification CB-certificate  standards, specifications, approvals hazardous environments  certificate of suitability  • CSA specifications consume the consumer of suitability  • CSA specifications consumer of suitability  • CSA approval  • CSA approval  **CSA approval**  **CSA approval**  **CSA approval**  **Tex*  • CSAus, Class 1, Division 2  **No  **No  **CSAus, Class 1, Division 2  **Tex*  **No  **No  **CSAus, Class 1, Division 2	charging current maximum	3 A	
communication function  protection and monitoring  design of short-circuit protection  display version for normal operation  safety  operating resource protection class protection class IP  standards, specifications, approvals  certificate of suitability  • CE marking  • UL approval  • CSA approval  • CSA approval  • CSA approval  cSA C22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, ULt 1)  type of certification CB-certificate  yes  standards, specifications, approvals hazardous environments  certificate of suitability  • CSA C25.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, ULt 1)  type of certification CB-certificate  Yes  standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • cCSAus, Class 1, Division 2	output voltage at DC rated value	24 V	
design of short-circuit protection display version for normal operation  safety  operating resource protection class protection class IP  standards, specifications, approvals  certificate of suitability  • CSA approval  • CSA approval  • CSA approval  type of certification CB-certificate  standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • CSA CSA CLASS 1, Division 2  SOA / 32V Maxi flat fuse  Three-color: green = Buffer ready; yellow = Buffer endangered; red = Bufpossible  SOA / 32V Maxi flat fuse  Three-color: green = Buffer ready; yellow = Buffer endangered; red = Bufpossible  Three-color: green = Buffer ready; yellow = Buffer endangered; red = Bufpossible  Three-color: green = Buffer ready; yellow	interfaces		
design of short-circuit protection display version for normal operation  Three-color: green = Buffer ready; yellow = Buffer endangered; red = Bufpossible  safety  operating resource protection class protection class IP  IP20  standards, specifications, approvals  certificate of suitability  • CE marking • UL approval  • CSA approval  • CSA approval  • CSA approval  type of certification CB-certificate  standards, specifications, approvals hazardous environments  certificate of suitability  • CSA specifications, approvals  • CSA approval  ATEX • CSAus, Class 1, Division 2	communication function	Yes	
display version for normal operation  Three-color: green = Buffer ready; yellow = Buffer endangered; red = Bufpossible  safety  operating resource protection class  protection class IP  standards, specifications, approvals  certificate of suitability  • CE marking  • UL approval  • CSA approval  • CSA approval  • CSA approval  Yes; cULus-Listed (UL 61010-1, UL61010-2-201, CSA C22.2 No. 61010-CSA C22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, ULid 1)  type of certification CB-certificate  yes  standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • CCSAus, Class 1, Division 2	protection and monitoring		
possible  safety  operating resource protection class   Class   II   protection class   IP   IP20    standards, specifications, approvals  certificate of suitability  • CE marking  • UL approval  • CSA c22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, ULi 1)  yes; cULus-Listed (UL 61010-1, UL61010-2-201, CSA C22.2 No. 61010 CSA C22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, ULi 1)  type of certification CB-certificate  standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • cCSAus, Class 1, Division 2	design of short-circuit protection	50A / 32V Maxi flat fuse	
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-CSA C22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, UL611)   • CSA approval   Yes; cULus-Listed (UL 61010-1, UL61010-2-201, CSA C22.2 No. 61010-CSA C22.2 No. 61010-	display version for normal operation	Three-color: green = Buffer ready; yellow = Buffer endangered; red = Buffer not possible	
protection class IP  standards, specifications, approvals  certificate of suitability  • CE marking  • UL approval  • CSA c22.2 NO 61010-2-201, File E143289; cCSAus (CSA 62368-1, ULid 1)  • CSA c22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, ULid 1)  type of certification CB-certificate  yes  standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • cCSAus, Class 1, Division 2	safety		
standards, specifications, approvals  certificate of suitability  • CE marking  • UL approval  • CSA c22.2 No. 61010-2-201, File E143289; cCSAus (CSA 62368-1, UL)  • CSA approval  • CSA approval  • CSA approval  • CSA c22.2 No. 61010-2-201, File E143289; cCSAus (CSA 62368-1, UL)  1)  type of certification CB-certificate  yes  standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • cCSAus, Class 1, Division 2	operating resource protection class	Class III	
certificate of suitability  CE marking  UL approval  CSA C22.2 NO 61010-2-201, CSA C22.2 No. 61010  CSA C22.2 NO 61010-2-201, File E143289; cCSAus (CSA 62368-1, ULG  Yes; cULus-Listed (UL 61010-1, UL61010-2-201, CSA C22.2 No. 61010  CSA C22.2 NO 61010-2-201, File E143289; cCSAus (CSA 62368-1, ULG  Yes; cULus-Listed (UL 61010-1, UL61010-2-201, CSA C22.2 No. 61010  CSA C22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, ULG  1)  type of certification CB-certificate  Yes  standards, specifications, approvals hazardous environments  certificate of suitability  ATEX  CCSAus, Class 1, Division 2	protection class IP	IP20	
CE marking     Ves     UL approval     Ves; cULus-Listed (UL 61010-1, UL61010-2-201, CSA C22.2 No. 61010-CSA C22.2 No. 61010-CSA C22.2 No. 61010-2-201), File E143289; cCSAus (CSA 62368-1, UL01)     Ves; cULus-Listed (UL 61010-1, UL61010-2-201, CSA C22.2 No. 61010-CSA C22.2 No. 61010-2-201), File E143289; cCSAus (CSA 62368-1, UL01)     type of certification CB-certificate     Yes     standards, specifications, approvals hazardous environments     certificate of suitability	standards, specifications, approvals		
VEs; cULus-Listed (UL 61010-1, UL61010-2-201, CSA C22.2 No. 61010-CSA C22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, UL61010-2-201), File E1432	certificate of suitability		
CSA C22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, ULu 1)  Yes; cULus-Listed (UL 61010-1, UL61010-2-201, CSA C22.2 No. 61010-CSA C22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, ULu 1)  type of certification CB-certificate  Yes  standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • cCSAus, Class 1, Division 2	CE marking	Yes	
CSA C22.2 NO 61010-2-201), File E143289; cCSAus (CSA 62368-1, ULu 1)  type of certification CB-certificate  Yes  standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • cCSAus, Class 1, Division 2	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; cCSAus (CSA 62368-1, UL62368-1)	
standards, specifications, approvals hazardous environments  certificate of suitability  • ATEX  • cCSAus, Class 1, Division 2  No	CSA 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; cCSAus (CSA 62368-1, UL62368-1)	
certificate of suitability  • ATEX  • cCSAus, Class 1, Division 2  No	type of certification CB-certificate	Yes	
ATEX     No     cCSAus, Class 1, Division 2     No	standards, specifications, approvals hazardous environments		
• cCSAus, Class 1, Division 2	certificate of suitability		
	• ATEX	No	
standards, specifications, approvals marine classification	• cCSAus, Class 1, Division 2	No	
	standards, specifications, approvals marine classification		
shipbuilding approval Yes	shipbuilding approval	Yes	

Marine classification association		
American Bureau of Shipping Europe Ltd. (ABS)	Yes	
Det Norske Veritas (DNV)	in preparation	
ambient conditions		
ambient condition	For storage, mounting and operation of batteries, the relevant DIN/VDE regulations or country-specific regulations (e.g. VDE 0510 Part 2/EN 50272-2) must be observed.	
ambient temperature		
<ul><li>during operation</li></ul>	-10 +50 °C	
during transport	-30 +70 °C	
during storage	-20 +35 °C	
relative temporary capacity loss at 20 °C in a month typical	1 %	
service life of energy storage	W. C. H. J. 2021 C. J.	
• typical	capacity falls to 80 % of original capacity (according to EUROBAT)	
• at 20 °C typical	11 a	
• at 30 °C typical	11 a	
<ul> <li>at 40 °C typical</li> <li>at 50 °C typical</li> </ul>	8 a	
•	6 a	
• at 60 °C typical	2 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.	
connection method		
type of electrical connection	screw terminal	
<ul> <li>for power supply unit</li> </ul>	1 screw terminal each for 0.5 16 mm² for + BAT and - BAT	
for control circuit and status message	1 screw terminal each for 0.2 2.5 mm <sup>2</sup>	
mechanical data		
width × height × depth of the enclosure	238 × 156 × 129 mm	
installation width × mounting height	238 × 256 mm	
required spacing		
• top	50 mm	
• bottom	50 mm	
• left	0 mm	
• right	0 mm	
fastening method	snaps onto DIN rail EN 60715 35x15 or wall mounting with accessories wall mounting set 6EP4990-0MK00-0XU0	
standard rail mounting	Yes	
S7 rail mounting	Yes	
wall mounting	Yes	
net weight	4 kg	
number of cells		
accessories		
product component included	2x Maxi Fuse 50 A/32 V	
mechanical accessories	BAT1600 wall mounting kit 6EP4990-0MK00-0XU0	
further information internet links		
internet link		
• to website: Industry Mall	https://mall.industry.siemens.com	
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud	
• to website: Industrial communication	http://www.siemens.com/simatic-net	
• to website: CAx-Download-Manager	http://www.siemens.com/cax	
to website: Industry Online Support	https://support.industry.siemens.com	
additional information	itional 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. 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	9	EC000356
ETIM	8	EC000356
ETIM	7	EC000356

Approvals Certificates

**General Product Approval** 





Manufacturer Declaration







**Dangerous Good** 

<u>Dangerous Goods Information</u>

last modified:

6/25/2024