



SITOP DC UPS Module/24VDC/40A

SITOP DC UPS module 24 V/40 A uninterruptible power supply without interface
input: 24 V DC/43 A output: 24 V DC/40 A

General information

Technical Product Detail Page

<https://l.siemens.com/1P6EP1931-2FC21>

input

supply voltage at DC rated value	24 V
input voltage at DC	22 ... 29 V
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

memory

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!

output

output voltage	
<ul style="list-style-type: none"> in normal operation at DC rated value in buffering mode at DC rated value 	24 V 24 V
formula for output voltage	$V_{in} - \text{approx. } 0.5 \text{ V}$
startup 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"> rated value in normal operation in buffering mode 	40 A 0 ... 40 A 0 ... 40 A
peak current	42 A
charging current	1 A, 2 A

efficiency

efficiency in percent	
<ul style="list-style-type: none"> at rated output voltage for rated value of the output current typical in case of operation on rechargeable battery typical 	97.2 % 96.9 %
power loss [W]	
<ul style="list-style-type: none"> at rated output voltage for rated value of the output current typical in case of operation on rechargeable battery typical 	28.6 W 33.6 W
supplied active power typical	960 W

protection and monitoring

product function	
<ul style="list-style-type: none"> reverse polarity protection against energy storage unit 	Yes

polarity reversal	
<ul style="list-style-type: none"> reverse polarity protection against input voltage polarity reversal 	Yes
display version	
<ul style="list-style-type: none"> for normal operation 	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 NOcontact "Bat > 85" closed; Permissible contact current capacity: DC 60 V/1 A or AC 30 V/1 A
<ul style="list-style-type: none"> in buffering mode 	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

interfaces

product component PC interface	No
product function communication function	No
design of the interface	without

safety

galvanic isolation between input and output	No
operating resource protection class	Class III
protection class IP	IP20
standard	
<ul style="list-style-type: none"> for emitted interference 	EN 55022 Class B
<ul style="list-style-type: none"> for interference immunity 	EN 61000-6-2

standards, specifications, approvals

certificate of suitability	
<ul style="list-style-type: none"> CE marking 	Yes
<ul style="list-style-type: none"> UL approval 	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
<ul style="list-style-type: none"> EAC approval 	Yes
MTBF at 40 °C	522 739 h

standards, specifications, approvals marine classification

shipbuilding approval	Yes
Marine classification association	
<ul style="list-style-type: none"> American Bureau of Shipping Europe Ltd. (ABS) 	Yes
<ul style="list-style-type: none"> Det Norske Veritas (DNV) 	Yes

standards, specifications, approvals Environmental Product Declaration

Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
<ul style="list-style-type: none"> total 	898.2 kg
<ul style="list-style-type: none"> during manufacturing 	45.1 kg
<ul style="list-style-type: none"> during operation 	851.8 kg
<ul style="list-style-type: none"> after end of life 	0.84 kg

ambient conditions

ambient temperature	
<ul style="list-style-type: none"> during operation 	-25 ... +60 °C; with natural convection
<ul style="list-style-type: none"> during transport 	-40 ... +85 °C
<ul style="list-style-type: none"> during storage 	-40 ... +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation

connection method

type of electrical connection	screw terminal
<ul style="list-style-type: none"> at input 	24 V DC: 2 screw terminals for 0.33 ... 10 mm ² /22 ... 7 AWG
<ul style="list-style-type: none"> at output 	24 V DC: 2 screw terminals for 0.33 ... 10 mm ² /22 ... 7 AWG
<ul style="list-style-type: none"> for rechargeable battery module 	24 V DC: 2 screw terminals for 0.33 ... 10 mm ² /22 ... 7 AWG
<ul style="list-style-type: none"> for control circuit and status message 	10 screw terminals for 0.5 ... 2.5 mm ² /20 ... 13 AWG

mechanical data

width × height × depth of the enclosure	102 × 125 × 125 mm
installation width × mounting height	102 mm × 225 mm
required spacing	
<ul style="list-style-type: none"> top 	50 mm

<ul style="list-style-type: none"> • bottom • left • right 	50 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
<ul style="list-style-type: none"> • DIN-rail mounting • S7 rail mounting • wall mounting 	Yes
	No
	No
housing can be lined up	Yes
net weight	1.1 kg

accessories

electrical accessories	Battery module
------------------------	----------------

further information internet links

internet link	
<ul style="list-style-type: none"> • to website: Industry Mall • to web page: selection aid TIA Selection Tool • to web page: power supplies • to website: CAx-Download-Manager • to website: Industry Online Support 	https://mall.industry.siemens.com https://www.siemens.com/tstcloud https://siemens.com/sitop https://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	<p>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)</p>
----------------------	---

Classifications

	Version	Classification
eClass	14	27-04-07-05
eClass	12	27-04-07-05
eClass	9.1	27-04-07-05
eClass	9	27-04-07-05
eClass	8	27-04-06-90
eClass	7.1	27-04-06-90
eClass	6	27-04-06-90
ETIM	10	EC000382
ETIM	9	EC000382
ETIM	8	EC000382
ETIM	7	EC000382
IDEA	4	4149
UNSPSC	15	39-12-10-11

Approvals Certificates

General Product Approval

[Manufacturer Declaration](#)

[Declaration of Conformity](#)



[China RoHS](#)



[Miscellaneous](#)

Maritime application | **Environment**



last modified:

5/5/2026