SIEMENS

Data sheet

6EP1931-2FC42



SITOP DC UPS Module/24VDC/40A/USB

SITOP DC UPS module 24 V/40 A uninterruptible 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
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	
 in normal operation at DC rated value 	24 V
 in buffering mode at DC rated value 	24 V
formula for output voltage	Vin - approx. 0.5 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	
rated value	40 A
 in normal operation 	0 40 A
in buffering mode	0 40 A
peak current	42 A
charging current	1 A, 2 A
efficiency	
efficiency in percent	
 at rated output voltage for rated value of the output current typical 	97.2 %
 in case of operation on rechargeable battery typical 	96.9 %
power loss [W]	
 at rated output voltage for rated value of the output current typical 	28.6 W
 in case of operation on rechargeable battery typical 	33.6 W
supplied active power typical	960 W
protection and monitoring	
product function	
 reverse polarity protection against energy storage unit polarity reversal 	Yes
 reverse polarity protection against input voltage polarity reversal 	Yes
display version	

• for normal operationNormal 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; floating
e > 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• in buffering modeBuffered 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%: LED

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interfaces	
product component PC interface	Yes
product function communication function	No
design of the interface	USB
safety	
galvanic isolation between input and output	No
operating resource protection class	Class III
protection class IP	IP20
standard	
 for emitted interference 	EN 55022 Class B
 for interference immunity 	EN 61000-6-2
standards, specifications, approvals	
certificate of suitability	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
EAC approval	Yes
MTBF at 40 °C	493 340 h
standards, specifications, approvals marine classification	
	Vee
shipbuilding approval	Yes
Marine classification association	N
American Bureau of Shipping Europe Ltd. (ABS)	Yes
Det Norske Veritas (DNV)	Yes
standards, specifications, approvals Environmental Product Dec	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
total	1 103.4 kg
 during manufacturing 	51.1 kg
 during operation 	1 051.5 kg
after end of life	0.81 kg
ambient conditions	
ambient temperature	
 during operation 	-25 +60; with natural convection
 during transport 	-40 +85
 during storage 	-40 +85
environmental category according to IEC 60721	Climate class 3K3, 5 95% no condensation
connection method	
type of electrical connection	screw terminal
• at input	24 V DC: 2 screw terminals for 0.33 10 mm ² /22 7 AWG
• at output	24 V DC: 2 screw terminals for 0.33 10 mm ² /22 7 AWG
for rechargeable battery module	24 V DC: 2 screw terminals for 0.33 10 mm ² /22 7 AWG
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	
	50 mm
• top	
• bottom	50 mm
• left	0 mm
• right	0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
DIN-rail mounting	Yes

S7 rail mounting	No				
wall mounting	No				
housing can be lined up	Yes	Yes			
net weight	1.1 kg	1.1 kg			
accessories					
electrical accessories	Battery module				
further information internet links					
internet link					
 to website: Industry Mall 	https://mall.industry.siemens.co	https://mall.industry.siemens.com			
 to web page: selection aid TIA Selection Tool 	https://www.siemens.com/tstclc	https://www.siemens.com/tstcloud			
 to web page: power supplies 	https://siemens.com/sitop	https://siemens.com/sitop			
 to website: CAx-Download-Manager 	https://siemens.com/cax	https://siemens.com/cax			
 to website: Industry Online Support 	https://support.industry.siemens	https://support.industry.siemens.com			
additional information					
other information	Specifications at rated input vol otherwise specified)	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)			
security information					
security information	that support the secure operation In order to protect plants, syste threats, it is necessary to imple state-of-the-art industrial cybers solutions constitute one element for preventing unauthorized acc networks. Such systems, mach to an enterprise network or the necessary and only when appro- network segmentation) are in p cybersecurity measures that may www.siemens.com/cybersecuri undergo continuous development recommends that product upda and that the latest product upda and that the latest product upda subscribe to the Siemens Indust	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 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	27-04-07-05		
	eClass	12	27-04-07-05		
	eClass	9.1	27-04-07-05		
	01035	0.1	21-04-01-03		

		ETIM	8	EC000382
		ETIM	7	EC000382
		IDEA	4	4149
		UNSPSC	15	39-12-10-11
Approvals Certificates				
General Product Ap	proval			

eClass

eClass

eClass

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ETIM

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Marine / Shipping

Environment

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