SIEMENS

Data sheet 6EP1931-2FC42

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



SITOP Module 24 V DC USV/40 A Uninterrupted Power supply With USB interface input: 24 V

DC/42.6 A output: 24 V DC/40 A

24 V supply voltage at DC rated value voltage curve at input DC input voltage range 22 ... 29 V DC adjustable response value voltage for buffer connection 22.5 V preset 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 Mains buffering 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! charging current 1 A, 2 A adjustable charging current maximum note factory setting approx. 2 A Output output voltage 24 V • in normal operation at DC rated value • in buffering mode at DC rated value 24 V formula for output voltage Vin - approx. 0.5 V startup delay time typical 360 ms voltage increase time of the output voltage typical output voltage in buffering mode at DC 19 ... 28.5 V output current • rated value 40 A 0 ... 40 A • in normal operation 0 ... 40 A • in buffering mode 42 A peak current supplied active power typical 960 W Efficiency efficiency in percent • at rated output voltage for rated value of the output 97.2 % current typical

power loss [W]

• in case of operation on rechargeable battery typical

96.9 %

 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
Protection and monitoring	
product function	
 reverse polarity protection against energy storage unit polarity reversal 	Yes
 reverse polarity protection against input voltage polarity reversal 	Yes
Signaling	
display version	
• 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 NO contact "Bat > 85" closed; Permissible contact current capacity: DC 60 V/1 A or AC 30 V /1 A
• 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
Interface	
product component PC interface	Yes
design of the interface	USB
Safety	
galvanic isolation between input and output	No
operating resource protection class	Class III
certificate of suitability	
CE marking	Yes
 as approval for USA 	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
• relating to ATEX	
• C-Tick	No
shipbuilding approval	ABS, DNV GL
protection class IP	IP20
EMC	
standard	FN FF000 Class B
for emitted interferencefor interference immunity	EN 55022 Class B EN 61000-6-2
	EN 01000-0-2
environmental conditions ambient temperature	
during operation	-25 +60 °C; with natural convection
during operation during transport	-40 +85 °C
during storage	-40 +85 °C
environmental category acc. to IEC 60721	Climate class 3K3, 5 95% no condensation
Mechanics	
type of electrical connection	screw-type terminals
• at input	24 V DC: 2 screw terminals for 0.33 10 mm²/22 7 AWG
• at output	24 V DC: 2 screw terminals for 0.33 10 mm²/22 7 AWG
• for rechargeable battery module	24 V DC: 2 screw terminals for 0.33 10 mm²/22 7 AWG
for control circuit and status message	10 screw terminals for 0.5 2.5 mm²/20 13 AWG
width of the enclosure	102 mm
height of the enclosure	125 mm
depth of the enclosure	125 mm
required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm

• right	0 mm
net weight	1.1 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
electrical accessories	Battery module
MTBF at 40 °C	493 340 h
reference code acc. to IEC 81346-2	T
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

