SIEMENS

Data sheet

6EP1931-2FC21

SITOP DC UPS MODULE 40A WITHOUT INTERF. SITOP Module 24 V DC USV/40 A Uninterrupted Power supply without interface input: 24 V DC/43 A output: 24 V DC/40 A



Input	
Supply voltage at DC Rated value	24 V
Voltage curve at input	DC
input voltage range	22 29 V DC
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
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	table battery module and mains buffering times as well as the
Charging current adjustable charging current maximum Note	table battery module and mains buffering times as well as the relevant important information notes!
	table battery module and mains buffering times as well as the relevant important information notes! 1 A, 2 A
adjustable charging current maximum Note	table battery module and mains buffering times as well as the relevant important information notes! 1 A, 2 A

 in buffering mode at DC Rated value 	24 V
Formula for output voltage	Vin - approx. 0.5 V
ON-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
Supplied active power typical	960 W
Efficiency	
Efficiency in percent	
 at rated output current for rated value of the output current typical 	97.2 %
 in case of accumulator operation typical 	96.9 %
Power loss [W]	
 at rated output current for rated value of the output current typical 	28.6 W
 in case of accumulator operation 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 in buffering mode 	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 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	No
Design of the interface	without
Safety	
Galvanic isolation between entrance and outlet	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	
for emitted interference	EN 55022 Class B
for interference immunity	EN 61000-6-2
environmental conditions	
Ambient temperature	
 during operation 	-25 +60 °C; with natural convection
 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 mm ² /22 7 AWG
• at output	24 V DC: 2 screw terminals for 0.33 10 mm ² /22 7 AWG
 for 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 for side-by- side mounting	Yes
Mounting type	Snaps onto DIN rail EN 60715 35x7.5/15
Electrical accessories	Battery module

MTBF at 40 °C	522 739 h
Reference code acc. to DIN EN 81346-2	Т
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)