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Data sheet 6EP1931-2EC31



SITOP DC UPS MODULE/24VDC/15A/SERIAL

SITOP DC-USV Module 24 V/15 A Uninterrupted Power supply With serial interface input: DC 24 V/16 A output: DC 24 V/15 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	15 A; + approx. 1 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	0.35 A, 0.7 A
adjustable charging current maximum note	factory setting approx. 0.7 A
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	60 ms
output voltage in buffering mode at DC	19 ... 28.5 V
output current	
● rated value	15 A
● in normal operation	0 ... 15 A
● in buffering mode	0 ... 15 A
peak current	15.7 A
property of the output short-circuit proof	Yes
supplied active power typical	360 W
Efficiency	
efficiency in percent	
● at rated output voltage for rated value of the output current typical	96.2 %
● in case of operation on rechargeable battery typical	96 %

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power loss [W]	
● at rated output voltage for rated value of the output current typical	14 W
● in case of operation on rechargeable battery typical	15 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	serial
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	
● 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 1 ... 4 mm²/17 ... 11 AWG
● at output	24 V DC: 4 screw terminals for 1 ... 4 mm²/17 ... 11 AWG
● for rechargeable battery module	24 V DC: 2 screw terminals for 1 ... 4 mm²/17 ... 11 AWG
● for control circuit and status message	10 screw terminals for 0.5 ... 2.5 mm²/20 ... 13 AWG
width of the enclosure	50 mm
height of the enclosure	125 mm
depth of the enclosure	125 mm
required spacing	
● top	50 mm
● bottom	50 mm

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● left	0 mm
● right	0 mm
net weight	0.45 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	725 689 h
reference code acc. to IEC 81346-2	T
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

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