

SIPLUS DC-USV-MODUL 24V/40A
 SIPLUS PS DC UPS module 24 V/40 A -25...+70°C with conformal coating based on 6EP1931-2FC21 . Uninterruptible Power supply without interface Input: 24 V DC/43 A Output: 24 V DC/40 A



Figure similar

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	1 A, 2 A
adjustable charging current maximum Note	factory setting approx. 2 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	$V_{in} - \text{approx. } 0.5 \text{ V}$
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	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	No
Design of the interface	without

Safety

Galvanic isolation between entrance and outlet	No
Operating resource protection class	Class III
Certificate of suitability <ul style="list-style-type: none"> • CE marking 	Yes
Protection class IP	IP20

EMC

Standard <ul style="list-style-type: none"> • for emitted interference • for interference immunity 	EN 55022 Class B EN 61000-6-2
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Operating data

Ambient temperature <ul style="list-style-type: none"> • during operation • during transport • during storage 	-25 ... +70 °C; with natural convection -40 ... +85 °C -40 ... +85 °C
Relative humidity with condensation maximum	100 %; Relative humidity, incl. condensation / frost permitted (no commissioning under condensation conditions)
Resistance to biologically active substances conformity acc. to EN 60721-3-3	Yes
Resistance to chemically active substances conformity acc. to EN 60721-3-3	Yes
Resistance to mechanically active substances conformity acc. to EN 60721-3-3	Yes

Mechanics

Type of electrical connection <ul style="list-style-type: none"> • at input • at output • for battery module • for control circuit and status message 	screw-type terminals 24 V DC: 2 screw terminals for 0.33 ... 10 mm²/22 ... 7 AWG 24 V DC: 2 screw terminals for 0.33 ... 10 mm²/22 ... 7 AWG 24 V DC: 2 screw terminals for 0.33 ... 10 mm²/22 ... 7 AWG 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 <ul style="list-style-type: none"> • top 	50 mm

<ul style="list-style-type: none"> • bottom • left • right 	50 mm
	0 mm
	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	T
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)