



SITOP DC UPS MODULE/24VDC/40A

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 | 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 | $V_{in} - \text{approx. } 0.5 \text{ V}$ |
| 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 |
| supplied active power typical | 960 W |
| 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] | |

| | |
|---|--|
| <ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical • in case of operation on rechargeable battery typical | 28.6 W 33.6 W |
| Protection and monitoring | |
| product function | |
| <ul style="list-style-type: none"> • reverse polarity protection against energy storage unit polarity reversal | Yes |
| <ul style="list-style-type: none"> • reverse polarity protection against input voltage polarity reversal | Yes |
| Signaling | |
| display version | |
| <ul style="list-style-type: none"> • 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 |
| <ul style="list-style-type: none"> • 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 input and output | No |
| operating resource protection class | Class III |
| certificate of suitability | |
| <ul style="list-style-type: none"> • CE marking | Yes |
| <ul style="list-style-type: none"> • as approval for USA | cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 |
| <ul style="list-style-type: none"> • relating to ATEX | - |
| <ul style="list-style-type: none"> • C-Tick | No |
| shipbuilding approval | ABS, DNV GL |
| protection class IP | IP20 |
| EMC | |
| standard | |
| <ul style="list-style-type: none"> • for emitted interference | EN 55022 Class B |
| <ul style="list-style-type: none"> • for interference immunity | EN 61000-6-2 |
| environmental conditions | |
| ambient temperature | |
| <ul style="list-style-type: none"> • during operation | -25 ... +60 °C; with natural convection |
| <ul style="list-style-type: none"> • during transport | -40 ... +85 °C |
| <ul style="list-style-type: none"> • 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 |
| <ul style="list-style-type: none"> • at input | 24 V DC: 2 screw terminals for 0.33 ... 10 mm ² /22 ... 7 AWG |
| <ul style="list-style-type: none"> • at output | 24 V DC: 2 screw terminals for 0.33 ... 10 mm ² /22 ... 7 AWG |
| <ul style="list-style-type: none"> • for rechargeable battery module | 24 V DC: 2 screw terminals for 0.33 ... 10 mm ² /22 ... 7 AWG |
| <ul style="list-style-type: none"> • for control circuit and status message | 10 screw terminals for 0.5 ... 2.5 mm ² /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 | 50 mm |
| <ul style="list-style-type: none"> • 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 | 522 739 h |
| reference code acc. to IEC 81346-2 | T |
| other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |

