



SITOP DC UPS MODULE 6A WITH USB INTERF.  
 SITOP DC UPS MODULE 24 V/6 A UNINTERRUPTIBLE POWER  
 SUPPLY WITH USB INTERFACE INPUT: 24 V DC/6.85 A OUTPUT:  
 24 V DC/6 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          | 6 A; + approx. 0.6 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                                               | 0.2 A                                                                                                                                                              |
| • 2                                               | 0.4 A                                                                                                                                                              |
| adjustable charging current maximum Note          | factory setting approx. 0.4 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 | 60 ms                                    |
| Output voltage in buffering mode at DC              | 19 ... 28.5 V                            |
| Output current                                      |                                          |
| • Rated value                                       | 6 A                                      |
| • in normal operation                               | 0 ... 6 A                                |
| • in buffering mode                                 | 0 ... 6 A                                |
| Peak current                                        | 6.3 A                                    |
| Property of the output Short-circuit proof          | Yes                                      |
| Supplied active power typical                       | 144 W                                    |

## Efficiency

|                                                           |        |
|-----------------------------------------------------------|--------|
| Efficiency in percent                                     |        |
| • at rated output current at rated output current typical | 95 %   |
| • in case of accumulator operation typical                | 94.5 % |
| Power loss [W]                                            |        |
| • at rated output current at rated output current typical | 7 W    |
| • in case of accumulator operation typical                | 8 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 entrance and outlet                                                                                                                         | No                                                                         |
| Operating resource protection class                                                                                                                                    | Class III                                                                  |
| Certificate of suitability <ul style="list-style-type: none"> <li>• CE marking</li> <li>• as approval for USA</li> <li>• relating to ATEX</li> <li>• C-Tick</li> </ul> | Yes<br>cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259<br>-<br>No |
| Shipbuilding approval                                                                                                                                                  | GL, ABS                                                                    |
| Protection class IP                                                                                                                                                    | IP20                                                                       |

## EMC

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

## Operating data

|                                                                                                                                                |                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Ambient temperature <ul style="list-style-type: none"> <li>• during operation</li> <li>• during transport</li> <li>• during storage</li> </ul> | -25 ... +60 °C; with natural convection<br>-40 ... +85 °C<br>-40 ... +85 °C |
| Environmental category acc. to IEC 60721                                                                                                       | Climate class 3K3, no condensation                                          |

## Mechanics

|                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of electrical connection <ul style="list-style-type: none"> <li>• at input</li> <li>• at output</li> <li>• for battery module</li> <li>• for control circuit and status message</li> </ul> | screw-type terminals<br>24 V DC: 2 screw terminals for 1 ... 4 mm²/17 ... 11 AWG<br>24 V DC: 4 screw terminals for 1 ... 4 mm²/17 ... 11 AWG<br>24 V DC: 2 screw terminals for 1 ... 4 mm²/17 ... 11 AWG<br>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 <ul style="list-style-type: none"> <li>• top</li> <li>• bottom</li> <li>• left</li> </ul>                                                                                      | 50 mm<br>50 mm<br>0 mm                                                                                                                                                                                                                                           |

|                                                                    |                                                                                                   |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| • right                                                            | 0 mm                                                                                              |
| Net weight                                                         | 0.45 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                                                      | 904 159 h                                                                                         |
| Equipment marking acc. to DIN EN 81346-2                           | T                                                                                                 |
| Other information                                                  | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |