



SITOP UPS1600 24V/20A ETHERN./PROFIN.  
 SITOP UPS1600 20A ETHERNET/ PROFINET UNINTERRUPTIBLE  
 POWER SUPPLY WITH ETHERNET/PROFINET INTER- FACE  
 INPUT: 24 V DC OUTPUT: 24 V DC/20 A

| Input   |   |
|---|---|
| Supply voltage for DC Rated value                   | 24 V  |
| Voltage curve at input                              | DC  |
| input voltage range                                 | 22 ... 29 V DC  |
| Mains buffering                                     |   |
| Type of energy storage                              | with batteries  |
| Charging current                                    |   |
| • 1   | 0.1 A   |
| • 2   | 4 A   |
| Output  |   |
| Output voltage                                      |   |
| • in normal operation for DC Rated value            | 24 V  |
| • in buffering mode for DC Rated value              | 24 V  |
| Formula for output voltage                          | $V_{in} - \text{approx. } 0.01 \times I$  |
| ON-delay time typical                               | 60 s  |
| Voltage increase time of the output voltage typical | 60 ms   |
| Output current Rated value                          | 20 A  |
| Property of the output Short-circuit proof          | Yes   |
| Design of short-circuit protection                  | Limitation to $3 \times I$ rated for 30 ms; through-conductivity for $1.5 \times I$ rated for 5 sec/min |
| Active power supplied typical                       | 480 W   |
| Efficiency  |   |
| Efficiency in percent                               |   |

|   |        |
|---|--------|
| <ul style="list-style-type: none"> <li>• at rated output current at rated output current typical</li> </ul> | 98.2 % |
| <ul style="list-style-type: none"> <li>• in case of accumulator operation typical</li> </ul>                | 98.2 % |
| Active power loss   |        |
| <ul style="list-style-type: none"> <li>• at rated output current at rated output current typical</li> </ul> | 8.6 W  |
| <ul style="list-style-type: none"> <li>• in case of accumulator operation typical</li> </ul>                | 8.6 W  |

## Protection and monitoring

|   |     |
|---|-----|
| Product function  |     |
| <ul style="list-style-type: none"> <li>• reverse polarity protection against energy storage unit polarity reversal</li> </ul> | Yes |
| <ul style="list-style-type: none"> <li>• reverse polarity protection against input voltage polarity reversal</li> </ul>       | Yes |

## Signaling

|  |   |
|--|---|
| Display version  |   |
| <ul style="list-style-type: none"> <li>• for normal operation</li> </ul> | 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"> <li>• in buffering mode</li> </ul>    | 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        | Ethernet/PROFINET |

## 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> </ul>          | Yes  |
| <ul style="list-style-type: none"> <li>• UL approval</li> </ul>         | Yes  |
| <ul style="list-style-type: none"> <li>• as approval for USA</li> </ul> | cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 |
| <ul style="list-style-type: none"> <li>• C-Tick</li> </ul>              | Yes  |
| Type of certification CB-certificate                                    | Yes  |
| Shipbuilding approval   | available soon   |
| 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 ... +70 °C<br>-40 ... +85 °C<br>-40 ... +85 °C   |
| Mechanics   |  |
| Type of electrical connection   | screw-type terminals   |
| <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> | 24 V DC: 2 screw terminals for 0.2 ... 6 mm <sup>2</sup> /24 ... 13 AWG<br>24 V DC: 2 screw terminals for 0.2 ... 6 mm <sup>2</sup> /24 ... 13 AWG<br>24 V DC: 2 screw terminals for 0.2 ... 6 mm <sup>2</sup> /24 ... 13 AWG<br>14 screw terminals for 0.2 ... 1.5 mm <sup>2</sup> /24 ... 16 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> <li>• right</li> </ul>  | 50 mm<br>50 mm<br>0 mm<br>0 mm   |
| Net weight  | 0.45 kg  |
| Product property 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   |
| Other information   | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)  |