

SITOP SMART 24 V/10 A, WALL MOUNTING  
 SITOP smart 240 W Stabilized power supply input: 120/230 V AC,  
 output: DC 24 V/10 A Option for for wall mounting



Input	
Input	1-phase AC
• Note	Set by means of selector switch on the device
Supply voltage	
• 1 at AC Rated value	120 V
• 2 at AC Rated value	230 V
Input voltage	
• 1 at AC	85 ... 132 V
• 2 at AC	170 ... 264 V
Wide-range input	No
Overvoltage resistance	$2.3 \times V_{in}$ rated, 1.3 ms
Mains buffering	at $V_{in} = 93/187$ V
Mains buffering at lout rated, min.	20 ms; at $V_{in} = 93/187$ V
Rated line frequency 1	50 Hz
Rated line frequency 2	60 Hz
Rated line range	47 ... 63 Hz
Input current	
• at rated input voltage 120 V	4.1 A
• at rated input voltage 230 V	2.4 A

Switch-on current limiting (+25 °C), max.	65 A
Duration of inrush current limiting at 25 °C	
• typical	3 ms
I <sup>2</sup> t, max.	3.3 A <sup>2</sup> ·s
Built-in incoming fuse	T 6.3 A/250 V (not accessible)
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 10 A characteristic C

## Output

Output	Controlled, isolated DC voltage
Rated voltage V <sub>out</sub> DC	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	0.5 %
Residual ripple peak-peak, max.	150 mV
Residual ripple peak-peak, typ.	50 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	240 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	150 mV
Adjustment range	22.8 ... 28 V
Product function Output voltage adjustable	Yes
Output voltage setting	via potentiometer
Status display	Green LED for 24 V OK
On/off behavior	Overshoot of V <sub>out</sub> approx. 4 %
Startup delay, max.	0.1 s
Voltage rise, typ.	50 ms
Rated current value I <sub>out</sub> rated	10 A
Current range	0 ... 12 A
• Note	12 A up to +45 °C
Supplied active power typical	288 W
Short-term overload current	
• on short-circuiting during the start-up typical	30 A
• at short-circuit during operation typical	33 A
Duration of overloading capability for excess current	
• on short-circuiting during the start-up	100 ms
• at short-circuit during operation	200 ms
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2

## Efficiency

Efficiency at V <sub>out</sub> rated, I <sub>out</sub> rated, approx.	90 %
Power loss at V <sub>out</sub> rated, I <sub>out</sub> rated, approx.	27 W

## Closed-loop control

Dynamic mains compensation ( $V_{in}$ rated $\pm 15\%$ ), max.	0.3 %
Dynamic load smoothing ( $I_{out}$ : 50/100/50 %), $U_{out} \pm$ typ.	1 %
Load step setting time 50 to 100%, typ.	0.2 ms
Load step setting time 100 to 50%, typ.	0.2 ms

### Protection and monitoring

Output overvoltage protection	< 33 V
Current limitation	12.5 ... 13.5 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Constant current characteristic
Enduring short circuit current RMS value <ul style="list-style-type: none"> <li>• typical</li> </ul>	16 A
Overload/short-circuit indicator	-

### Safety

Primary/secondary isolation	Yes
Galvanic isolation	Safety extra-low output voltage $U_{out}$ acc. to EN 60950-1 and EN 50178
Protection class	Class I
Leakage current <ul style="list-style-type: none"> <li>• maximum</li> <li>• typical</li> </ul>	3.5 mA 0.8 mA
Degree of protection (EN 60529)	IP20

### Approvals

CE mark	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
Explosion protection	-
FM approval	-
CB approval	Yes
Marine approval	-

### EMC

Emitted interference	EN 55022 Class B
Supply harmonics limitation	-
Noise immunity	EN 61000-6-2

### environmental conditions

Ambient temperature <ul style="list-style-type: none"> <li>• during operation</li> <li>— Note</li> <li>• during transport</li> <li>• during storage</li> </ul>	0 ... 60 °C with natural convection -40 ... +85 °C -40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, 5 ... 95% no condensation

Mechanics	
Connection technology	screw-type terminals
Connections	
<ul style="list-style-type: none"> <li>• Supply input</li> <li>• Output</li> <li>• Auxiliary</li> </ul>	L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm <sup>2</sup> single-core/finely stranded L+, M: 2 screw terminals each for 0.5 ... 2.5 mm <sup>2</sup> -
Width of the enclosure	70 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 50 mm 0 mm 0 mm
Weight, approx.	0.85 kg
Product feature of the enclosure housing for side-by-side mounting	Yes
Installation	Wall mounting
MTBF at 40 °C	1 460 803 h
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)