

SITOP POWER DC/DC 24 V/2 A  
 SITOP POWER 2, DC/DC STABILIZED POWER SUPPLY INPUT:  
 48/60/110 V DC OUTPUT: 24 V DC/2 A



Input	
Input	DC voltage
Supply voltage	
<ul style="list-style-type: none"> <li>at DC</li> </ul>	48 ... 110 V
Input voltage	
<ul style="list-style-type: none"> <li>at DC</li> </ul>	38 ... 121 V
Wide-range input	Yes
Overvoltage resistance	-
Mains buffering at I <sub>out</sub> rated, min.	5 ms; at V <sub>in</sub> = 48 V
Input current	
<ul style="list-style-type: none"> <li>at rated input voltage 48 V</li> <li>at rated input voltage 110 V</li> </ul>	1.2 A 0.5 A
Switch-on current limiting (+25 °C), max.	33 A
Built-in incoming fuse	T 2.5 A (not accessible)
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: 10 to 25 A characteristic B or 6 to 25 A characteristic C, suitable for DC
Output	
Output	Controlled, isolated DC voltage
Rated voltage V <sub>out</sub> DC	24 V

Total tolerance, static $\pm$	1 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	0.4 %
Residual ripple peak-peak, max.	100 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	300 mV
Adjustment range	23.5 ... 26.5 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 Vout on startup max. 25 V
Startup delay, max.	3 s
Voltage rise, typ.	30 ms
Rated current value Iout rated	2 A
Current range	0 ... 2 A
Supplied active power typical	48 W
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2

Efficiency	
Efficiency at Vout rated, Iout rated, approx.	84 %
Power loss at Vout rated, Iout rated, approx.	9 W

Closed-loop control	
Dynamic mains compensation (Vin rated $\pm 15$ %), max.	0.3 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout $\pm$ typ.	0.8 %
Load step setting time 50 to 100%, typ.	2.5 ms
Load step setting time 100 to 50%, typ.	2.5 ms

Protection and monitoring	
Output overvoltage protection	Yes, suppressor diode at output
Current limitation	2.1 ... 3 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Electronic shutdown, automatic restart
Enduring short circuit current RMS value <ul style="list-style-type: none"> <li>• maximum</li> </ul>	2 A
Overload/short-circuit indicator	-

Safety	
Primary/secondary isolation	Yes
Galvanic isolation	Safety extra low output voltage Vout according to EN 60950-1
Protection class	Class I
Leakage current <ul style="list-style-type: none"> <li>• maximum</li> </ul>	3.5 mA

• typical	0.7 mA
CE mark	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 142), File E179336
Explosion protection	-
FM approval	-
CB approval	No
Marine approval	-
Degree of protection (EN 60529)	IP20

## EMC

Emitted interference	EN 55022 Class B
Supply harmonics limitation	not applicable
Noise immunity	EN 61000-6-2

## Operating data

Ambient temperature	
• during operation	0 ... 70 °C
— Note	with natural convection
• during transport	-40 ... +70 °C
• during storage	-40 ... +70 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation

## Mechanics

Connection technology	screw-type terminals
Connections	
• Supply input	L+, M1, PE: 1 screw terminal each for 2 x 0.5 ... 2.5/1.5 mm <sup>2</sup> single-core/finely stranded
• Output	L+, M: 1 screw terminal each for 2 x 0.5 ... 2.5 mm <sup>2</sup>
• Auxiliary	-
Width of the enclosure	80 mm
Height of the enclosure	135 mm
Depth of the enclosure	120 mm
Required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm
• right	0 mm
Weight, approx.	0.5 kg
Product feature of the enclosure housing for side-by-side mounting	Yes
Installation	Snaps onto DIN rail EN 60715 35x15
MTBF at 40 °C	1 580 078 h
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)