

SITOP CNX8600 8X2.5A  
 SITOP CNX8600 8x2.5 A Extension module for PSU8600 Output: 24 V DC / 8x 2.5 A Outputs according to NEC Class 2



Output	
Output	Controlled, isolated DC voltage
number of outputs	8
Rated voltage $V_{out}$ DC	24 V
<ul style="list-style-type: none"> <li>• output voltage at output 1 at DC rated value</li> <li>• output voltage at output 2 at DC rated value</li> <li>• output voltage at output 3 at DC rated value</li> <li>• output voltage at output 4 at DC rated value</li> <li>• output voltage at output 5 at DC rated value</li> <li>• output voltage at output 6 at DC rated value</li> <li>• output voltage at output 7 at DC rated value</li> <li>• output voltage at output 8 at DC rated value</li> </ul>	24 V 24 V 24 V 24 V 24 V 24 V 24 V 24 V
Total tolerance, static $\pm$	3 %
Static mains compensation, approx.	0.2 %
Static load balancing, approx.	0.1 %
Residual ripple peak-peak, max.	100 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	200 mV
Adjustment range	4 ... 28 V
product function output voltage adjustable	Yes

Output voltage setting	via potentiometer or IE/PN interface; Derating > 24 V: 4%/V; max. 60 W per output
Status display	3-color LED for operating state module; 3-color LED per output for operating state output
Signaling	Relay contact (changeover contact, contact current capacity DC 60 V/0.3 A) for "Operating state OK" at power supply unit PSU8600
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	1.5 s; Without on-delay of the outputs
connection of outputs operating	Simultaneous connecting-in of all outputs after device booting or delay time of 25 ms, 100 ms or "load-optimized" for sequential cutting-in of the outputs via DIP switches at power supply unit PSU8600 can be set
voltage increase time of the output voltage maximum	500 ms
Rated current value Iout rated	20 A
output current	
• per output	2.5 A
• at output 1 rated value	2.5 A
• at output 2 rated value	2.5 A
• at output 3 rated value	2.5 A
• at output 4 rated value	2.5 A
• at output 5 rated value	2.5 A
• at output 6 rated value	2.5 A
• at output 7 rated value	2.5 A
• at output 8 rated value	2.5 A
Current range	0 ... 20 A
• Note	Outputs meet requirements to NEC Class 2; an increase of the maximum output power of the SITOP PSU8600 overall system is not possible over the SITOP CNX8600 expansion module
supplied active power typical	480 W
product feature parallel switching of outputs	No
Parallel switching for enhanced performance	No
<b>Efficiency</b>	
Efficiency at Vout rated, Iout rated, approx.	97 %
Power loss at Vout rated, Iout rated, approx.	15 W
<b>Closed-loop control</b>	
Dynamic mains compensation (Vin rated ±15 %), max.	0.1 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ.	0.4 %
setting time maximum	10 ms
<b>Protection and monitoring</b>	
Output overvoltage protection	< 35 V

property of the output short-circuit proof	Yes
Short-circuit protection	electronic overload cut-off
adjustable response value current of current-dependent overload trip	0.5 ... 2.5 A
type of threshold value setting	via potentiometer or IE/PN interface
characteristics of electronic overload switch-off	$I_a > 1.0 \dots < 1.5 \times I_a$ threshold permissible for 5 s; $I_a$ limit (= $1.5 \times I_a$ threshold) permissible for 200 ms
Reset	via sensor per output or IE/PN interface
Remote reset	Non-electrically isolated 24 V input (signal level "high" at > 15 V) at power supply unit PSU8600
Overload/short-circuit indicator	3-color LED for operating state module; 3-color LED per output for operating state output

Interface	
Specification interface	Ethernet/PROFINET via power supply unit PSU8600

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 III
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; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2
Explosion protection	IECEX Ex nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4 Gc; cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T4
certificate of suitability NEC Class 2	Yes
FM approval	-
CB approval	Yes
Regulatory Compliance Mark (RCM)	Yes
Marine approval	ABS, DNV GL

EMC	
Emitted interference	EN 55022 Class B
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>	<p>-25 ... +60 °C with natural convection</p> <p>-40 ... +85 °C</p> <p>-40 ... +85 °C</p>
Humidity class according to EN 60721	Climate class 3K3, 5 ... 95% no condensation

## Mechanics

Connection technology	Plug-in terminals with screwed connection
Connections	
<ul style="list-style-type: none"> <li>• Output</li> </ul>	1, 2, 3, 4, 5, 6, 7, 8: Two plug-in terminals (1...4 and 5...8) with 1 screwed connection each for 0.2 ... 2.5 mm <sup>2</sup> ; Ground: Plug-in terminal with 3 screwed connections for 0.2 ... 2.5 mm <sup>2</sup>
product function	
<ul style="list-style-type: none"> <li>• removable terminal at output</li> </ul>	Yes
suitability for interaction modular system	Yes
type of connection to system components	Via integrated connector
width of the enclosure	100 mm
height of the enclosure	125 mm
depth of the enclosure	150 mm
required spacing	
<ul style="list-style-type: none"> <li>• top</li> </ul>	50 mm
<ul style="list-style-type: none"> <li>• bottom</li> </ul>	50 mm
<ul style="list-style-type: none"> <li>• left</li> </ul>	0 mm
<ul style="list-style-type: none"> <li>• right</li> </ul>	0 mm
Weight, approx.	1.29 kg
product feature of the enclosure housing for side-by-side mounting	Yes
Installation	Snaps onto DIN rail EN 60715 35x15
mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
MTBF at 40 °C	327 369 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)