



SITOP CNX8600/4X10A

SITOP CNX8600 4x10 A expansion module for PSU8600 output: 24 V DC/4x 10 A

Technical Product Detail Page

<https://i.siemens.com/1P6EP4437-8XB00-0CY0>

| output                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| voltage curve at output                                                                                                                                                                                                                                                 | Controlled, isolated DC voltage                                                                                                                                                                                     |
| number of outputs                                                                                                                                                                                                                                                       | 4                                                                                                                                                                                                                   |
| output voltage at DC rated value                                                                                                                                                                                                                                        | 24 V                                                                                                                                                                                                                |
| output voltage <ul style="list-style-type: none"> <li>• at output 1 at DC rated value</li> <li>• at output 2 at DC rated value</li> <li>• at output 3 at DC rated value</li> <li>• at output 4 at DC rated value</li> </ul>                                             | 24 V<br>24 V<br>24 V<br>24 V                                                                                                                                                                                        |
| output voltage adjustable                                                                                                                                                                                                                                               | Yes; via potentiometer or IE/PN interface                                                                                                                                                                           |
| adjustable output voltage                                                                                                                                                                                                                                               | 4 ... 28 V; Derating > 24 V: 4%/V; max. 240 W per output                                                                                                                                                            |
| relative overall tolerance of the voltage                                                                                                                                                                                                                               | 3 %                                                                                                                                                                                                                 |
| relative control precision of the output voltage <ul style="list-style-type: none"> <li>• on slow fluctuation of input voltage</li> <li>• on slow fluctuation of ohm loading</li> </ul>                                                                                 | 0.2 %<br>0.1 %                                                                                                                                                                                                      |
| residual ripple <ul style="list-style-type: none"> <li>• maximum</li> </ul>                                                                                                                                                                                             | 100 mV                                                                                                                                                                                                              |
| voltage peak <ul style="list-style-type: none"> <li>• maximum</li> </ul>                                                                                                                                                                                                | 200 mV                                                                                                                                                                                                              |
| display version for normal operation                                                                                                                                                                                                                                    | 3-color LED for operating state module; 3-color LED per output for operating state output                                                                                                                           |
| type of signal at output                                                                                                                                                                                                                                                | Relay contact (changeover contact, contact current capacity DC 60 V/0.3 A) for "Operating state OK" at power supply unit PSU8600                                                                                    |
| behavior of the output voltage when switching on                                                                                                                                                                                                                        | No overshoot of Vout (soft start)                                                                                                                                                                                   |
| response delay maximum                                                                                                                                                                                                                                                  | 1.5 s; Without on-delay of the outputs                                                                                                                                                                              |
| type of outputs connection                                                                                                                                                                                                                                              | 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 <ul style="list-style-type: none"> <li>• maximum</li> </ul>                                                                                                                                                                 | 500 ms                                                                                                                                                                                                              |
| output current <ul style="list-style-type: none"> <li>• rated value</li> <li>• per output</li> <li>• at output 1 rated value</li> <li>• at output 2 rated value</li> <li>• at output 3 rated value</li> <li>• at output 4 rated value</li> <li>• rated range</li> </ul> | 40 A<br>10 A<br>10 A<br>10 A<br>10 A<br>10 A<br>0 ... 40 A; No increase in the maximum output power of the overall system SITOP PSU8600 via the expansion module SITOP CNX8600 possible                             |

|                                                                                                                                                                     |                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| supplied active power typical                                                                                                                                       | 960 W                                                                                                     |
| parallel switching of outputs                                                                                                                                       | No                                                                                                        |
| bridging of equipment                                                                                                                                               | No                                                                                                        |
| efficiency                                                                                                                                                          |                                                                                                           |
| efficiency in percent                                                                                                                                               | 97 %                                                                                                      |
| power loss [W] <ul style="list-style-type: none"><li>at rated output voltage for rated value of the output current typical</li></ul>                                | 30 W                                                                                                      |
| closed-loop control                                                                                                                                                 |                                                                                                           |
| relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical                                                     | 0.1 %                                                                                                     |
| relative control precision of the output voltage load step of resistive load 50/100/50 % typical                                                                    | 0.4 %                                                                                                     |
| setting time <ul style="list-style-type: none"><li>maximum</li></ul>                                                                                                | 10 ms                                                                                                     |
| protection and monitoring                                                                                                                                           |                                                                                                           |
| design of the overvoltage protection                                                                                                                                | max. 35 V (max. 500 ms)                                                                                   |
| property of the output short-circuit proof                                                                                                                          | Yes                                                                                                       |
| design of short-circuit protection                                                                                                                                  | electronic overload cut-off                                                                               |
| adjustable current response value current of the current-dependent overload release                                                                                 | 0.5 ... 10 A                                                                                              |
| type of response value setting                                                                                                                                      | via potentiometer or IE/PN interface                                                                      |
| switching characteristic <ul style="list-style-type: none"><li>of the excess current</li></ul>                                                                      | Ia >1.0...<1.5 x Ia threshold permissible for 5 s; Ia limit (= 1.5 x Ia threshold) permissible for 200 ms |
| display version for overload and short circuit                                                                                                                      | 3-color LED for operating state module; 3-color LED per output for operating state output                 |
| design of the reset device/resetting mechanism                                                                                                                      | via sensor per output or IE/PN interface                                                                  |
| remote reset function                                                                                                                                               | Non-electrically isolated 24 V input (signal level "high" at > 15 V) at power supply unit PSU8600         |
| interfaces                                                                                                                                                          |                                                                                                           |
| product function communication function                                                                                                                             | Yes                                                                                                       |
| design of the interface                                                                                                                                             | Ethernet/PROFINET via power supply unit PSU8600                                                           |
| safety                                                                                                                                                              |                                                                                                           |
| galvanic isolation between input and output                                                                                                                         | Yes                                                                                                       |
| galvanic isolation                                                                                                                                                  | Safety extra low output voltage Vout according to EN 61204-7                                              |
| operating resource protection class                                                                                                                                 | Class III                                                                                                 |
| 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                                                                          |
| standards, specifications, approvals                                                                                                                                |                                                                                                           |
| certificate of suitability <ul style="list-style-type: none"><li>CE marking</li><li>UL approval</li><li>EAC approval</li><li>NEC Class 2</li><li>SEMI F47</li></ul> | Yes<br>Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259<br>Yes<br>No<br>Yes                  |
| type of certification <ul style="list-style-type: none"><li>CB-certificate</li></ul>                                                                                | Yes                                                                                                       |
| MTBF at 40 °C                                                                                                                                                       | 358 372 h                                                                                                 |
| standards, specifications, approvals hazardous environments                                                                                                         |                                                                                                           |
| certificate of suitability <ul style="list-style-type: none"><li>IECEX</li><li>ATEX</li><li>ULhazloc approval</li><li>FM registration</li></ul>                     | No<br>No<br>No<br>No                                                                                      |
| standards, specifications, approvals marine classification                                                                                                          |                                                                                                           |
| shipbuilding approval                                                                                                                                               | Yes                                                                                                       |

|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Marine classification association                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • American Bureau of Shipping Europe Ltd. (ABS)                               | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| • French marine classification society (BV)                                   | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| • Det Norske Veritas (DNV)                                                    | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| • Lloyds Register of Shipping (LRS)                                           | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>standards, specifications, approvals Environmental Product Declaration</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Environmental Product Declaration                                             | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| global warming potential [CO2 eq]                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • total                                                                       | 990.8 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • during manufacturing                                                        | 50.6 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| • during operation                                                            | 939 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| • after end of life                                                           | 1.14 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>ambient conditions</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| ambient temperature                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • during operation                                                            | -25 ... +60 °C; with natural convection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| • during transport                                                            | -40 ... +85 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| • during storage                                                              | -40 ... +85 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| environmental category according to IEC 60721                                 | Climate class 3K3, 5 ... 95% no condensation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>connection method</b>                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| type of electrical connection                                                 | Plug-in terminals with screwed connection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| • at output                                                                   | 1, 2, 3, 4: Two plug-in terminals (1, 2 and 3, 4) with 2 screwed connections 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| removable terminal at output                                                  | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| suitability for interaction modular system                                    | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| type of connection to system components                                       | Via integrated connector                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>mechanical data</b>                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| width × height × depth of the enclosure                                       | 60 × 125 × 150 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| installation width × mounting height                                          | 60 mm × 225 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| required spacing                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • top                                                                         | 50 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| • bottom                                                                      | 50 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| • left                                                                        | 0 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| • right                                                                       | 0 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| fastening method                                                              | Snaps onto DIN rail EN 60715 35x15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| • DIN-rail mounting                                                           | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| • S7 rail mounting                                                            | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| • wall mounting                                                               | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| housing can be lined up                                                       | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| net weight                                                                    | 1.15 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>accessories</b>                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| mechanical accessories                                                        | Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>further information internet links</b>                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| internet link                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • to website: Industry Mall                                                   | <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| • to web page: selection aid TIA Selection Tool                               | <a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| • to web page: power supplies                                                 | <a href="https://siemens.com/sitop">https://siemens.com/sitop</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| • to website: CAX-Download-Manager                                            | <a href="https://siemens.com/cax">https://siemens.com/cax</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| • to website: Industry Online Support                                         | <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>additional information</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| other information                                                             | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>security information</b>                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| security information                                                          | Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is |

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Classifications

|        | Version | Classification |
|--------|---------|----------------|
| eClass | 14      | 27-04-07-01    |
| eClass | 12      | 27-04-07-01    |
| eClass | 9.1     | 27-04-07-01    |
| eClass | 9       | 27-04-07-01    |
| eClass | 8       | 27-04-90-02    |
| eClass | 7.1     | 27-04-90-02    |
| eClass | 6       | 27-04-90-02    |
| ETIM   | 10      | EC002540       |
| ETIM   | 9       | EC002540       |
| ETIM   | 8       | EC002540       |
| ETIM   | 7       | EC002540       |
| IDEA   | 4       | 4130           |
| UNSPSC | 15      | 39-12-10-04    |

Approvals Certificates

General Product Approval



[Manufacturer Declaration](#)

[Declaration of Conformity](#)



[China RoHS](#)

| General Product Approval | Maritime application | Environment |
|--------------------------|----------------------|-------------|
|--------------------------|----------------------|-------------|



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