

# SEC3ER

## Datasheet



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## Processor / Memory / Mass Storage

|       |                     |
|-------|---------------------|
| CPU   | ARM Cortex-A8 1 GHz |
| RAM   | 256 MB DDR3L        |
| Flash | 512 MB SLC NAND     |

## Power Supply

|                       |  |
|-----------------------|--|
| Input Voltage         | 115 / 230 V AC (85 - 264 V AC)   |
| Appliance class       | I (earth conductor contact)  |
| Input frequency range | 47 – 63 Hz   |
| Power consumption     | Max. 65 W (typ. 4 W without USB)   |
| Input current         | Max. 1.5 A   |
| Input protection      | 2A / 250VAC; One non-user serviceable internally located AC input line fuse. |
| Hold up time          | 115 V AC – max. 9 ms / 230 V AV – max. 50 ms                                 |
| Power connection      | IEC power connector (IEC 60320-C14)  |

## Interfaces

|                    |  |
|--------------------|--|
| Ethernet-Relays    | 4x RJ45 Ethernet-relays – interface pairs E1-E4 (compatible for 10M/100M/1G/10G Ethernet)  |
| Control switch     | 4x 3-way switch E1-E4 to control the relays interface pairs<br>ON / OFF – Manual control<br>REMOTE – Software-based control  |
| Ethernet interface | 2x RJ45 10/100BASE-T (ETH0/ETH1)   |
| Serial interface   | 2x RJ45 RS232 / RS422 / RS485<br>Baud Rate: 300 – 115200 Baud  |
| USB interface      | 2 x USB 2.0 up to 480 Mbps “high speed”  |
| Digital Input      | 8x Digital Input<br>Input voltage: 0 – 24 V DC ( $U_{DI1-8\_max}$ : 30 V DC)<br>Input level low: $\leq 2.96$ V DC $\pm 1\%$<br>Input level high: $\geq 3.49$ V DC $\pm 1\%$<br>Input impedance: $1.28$ M $\Omega$ $\pm 2\%$<br>Sampling rate: max. 500 Hz $\pm 5\%$<br><br>Line cross-section: 0.129 – 3.31 mm <sup>2</sup><br>(AWG 26...12, solid or stranded wire) |

## Digital Output

8x Digital Output (MOSFET P-Channel high side)

Input voltage  $V_{SO}$ : 9 – 24 V DC

-  $U_{VSO\_max}$ : 30 V DC

-  $I_{VSO\_max}$ : 4 A

Output voltage:

$$U_{DO1-8} = V_{SO} - \{0.4 \text{ V @ } 0 \text{ A} \dots 1 \text{ V @ } 0.5 \text{ A}\}$$

Max. output current: 500 mA

Max. switching frequency:  $t_{impulse} \leq 2 \text{ kHz} \pm 25\%$

Overcurrent protection - switchover to high-impedance state in the event of a fault:

- if 500 mA limit is exceeded

- when switching on load  $\geq 350\text{mA}$

- switch-off time in case of error:  $65\mu\text{s} \pm 5\%$   
(with  $22\Omega$  and  $U_{VSO} = 24 \text{ V DC}$ )

- deactivation switch-off of outputs can be reset by software

Line cross-section: 0.129 – 3.31 mm<sup>2</sup>

(AWG 26...12, solid or stranded wire)

## Diagnostics (Status LEDs)

|             |  |
|-------------|--|
| PWR         | Power LED  |
| USR         | LED freely configurable by software  |
| CPU         | LED to show different software conditions  |
| COM1 / COM2 | Send and receive LED for serial interfaces   |
| ETH0 / ETH1 | Link and activity LED for Ethernet interfaces  |
| DI 1 – 8    | Status LED for digital input<br>( <i>green if high level</i> )   |
| DO 1 – 8    | Status LED for digital output<br>( <i>green if output active; red if output deactivated due to error</i> )   |
| E1 – E4     | Three status LEDs each for displaying the current connection status of the Ethernet relays pairs E1-E4<br>( <i>red if interface is active; orange if interface is controlled by software; green if interface is inactive</i> ) |

## Additional Functions and Features

|  |   |
|--|---|
| Bistable relay Ethernet interfaces pairs | Four Ethernet interface pairs with control switch and diagnostic LEDs (per E1-E4) |
| Battery buffered real time clock         | Supported by a lithium battery (CR2032)   |
| Hardware watchdog                        |   |
| Temperature monitoring                   |   |
| Overvoltage protection                   | The power supply and all interfaces are ESD, surge, and burst protected (see EMC) |

## Housing

|                        |   |
|------------------------|---|
| Body material          | Steel chassis                                       |
| Mounting               | 19" rack mounting with mounting brackets (included) |
| IP Code                | IP20  |
| Rotating parts         | None  |
| Dimensions (W x H x D) | approx. 354 mm x 44 mm x 164 mm (without brackets)  |
| Weight                 | approx. 2 kg  |

## Operating Environment

|                       |                          |
|-----------------------|--------------------------|
| Operating temperature | -20 °C to 60 °C          |
| Storage temperature   | -40 °C to 85 °C          |
| Relative humidity     | 5% to 95% not condensing |

## Approval, Standards and Conformity

|            |                       |
|------------|-----------------------|
| Approval   | CE (Industrial)       |
| Standards  |                       |
| Conformity | RoHS<br>REACH<br>WEEE |