



#### Features

- ✓ 4 counters
- ✓ Count depth 32 bit (sign-allocated  $\pm 231$ )
- ✓ Up to 1 kHz counting frequency per counter
- ✓ 24 V voltage supply for counter
- ✓ 9 bytes of input data (count and status)
- ✓ 10 bytes of output data (preset count and control functions)

## Counter Economy, 24V, 32 bit, 1 kHz 4x

Counters are used to detect pulses that are faster than a controller's cycles, i.e., signals that the controller will be unable to detect properly and that therefore need to be pre-processed.

The counter module records the edges of 24 V signals as pulses. The pulses are counted and the current count value is always available to the PLC.

The counting function can be enabled by PLC control commands.

The counter value can be preassigned or reset by the PLC

#### PLC control functions

counter release

Reset count

Load counter value

Change counting direction

**Note:** Individual modules cannot be combined with IO systems from other manufacturers.

#### General information

|                    |                                        |
|--------------------|----------------------------------------|
| Order number       | 600-300-1AD01                          |
| Article name       | 4x Counter Economy 24 V, 1 KHz, 32 bit |
| Scope of delivery  | 4x Counter Economy 24 V, 1 KHz, 32 bit |
| Dimensions (DxWxH) | 110 x 14 x 73 mm                       |

|                                |                                             |
|--------------------------------|---------------------------------------------|
| Weight                         | Approx. 70 g                                |
| Input voltage                  | 24 V DC                                     |
| Power dissipation              | Max. 0.95 W                                 |
| Input characteristic curve     | Type 2, EN 61131-2                          |
| Number of counters             | 4                                           |
| Counter bit depth              | 32 bit, sign allocated +/- 231              |
| Counting frequency per channel | Max. 1 kHz, 1x evaluation, rising edges     |
| Counter functions              | Forwards/backwards, Load count, Reset count |
| Hot-swap capable               | Yes                                         |

#### Electrical isolation

|                        |     |
|------------------------|-----|
| from the backplane bus | Yes |
| Between the channels   | No  |

#### Current draw

|          |            |
|----------|------------|
| External | Max. 0 mA  |
| Internal | Max. 22 mA |

#### Ambient conditions

|                                   |                               |
|-----------------------------------|-------------------------------|
| Ambient temperature               | 0 °C ... +60 °C               |
| Transport and storage temperature | -20 °C ... +80 °C             |
| Relative air humidity             | 95 % r H without condensation |
| Protection rating                 | IP 20                         |
| Certifications                    | CE, UL                        |

#### UL

|                             |                |
|-----------------------------|----------------|
| Surrounding Air Temperature | 0 °C ... +60°C |
| Pollution degree            | 2              |

#### CE

|                                |                                                                   |
|--------------------------------|-------------------------------------------------------------------|
| Noise immunity                 | DIN EN 61000-6-2 "EMC Immunity"                                   |
| Interference emission          | DIN EN 61000-6-4 "EMC Emission"                                   |
| Vibration and shock resistance | DIN EN 60068-2-6:2008 „Vibration“, DIN EN 60068-2-27:2010 „Shock" |
| RoHS                           | Yes                                                               |

REACH

Yes

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Änderungen und Irrtümer vorbehalten