



Counter

1x Counter 5 V (RS422), 4 MHz, 32 Bit

- 32-bit counter
- Up to 4 MHz (4-fold evaluation)
- Accommodates 5 V incremental encoders (RS-422)
- Index input
- 5 V supply for sensors
- Filters: 50 kHz | 100 kHz | 500 kHz | 1 MHz
- Limits for counter and measured readings
- Refresh rate / averaging time for measuring mode
- 8 bytes of input data (count and status)
- 8 bytes of output data (preset count and commands)

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 detects the edges of 24 V signals as pulses. The impulses can be counted or converted into a frequency, rotational speed, or period. The counter module features an additional 24 V input and a 24 V output for a direct response to start pulses and to quick system state changes.

Erfassungsmethode

Pulse & direction

Rotary encoder with double evaluation

Rotary encoder with quadruple evaluation

Counting methods

Continuous counting

Once-only counting

Periodic counting

Measuring mode

Frequency measurement

Rotational speed measurement

Period measurement

Synchronization

Off

Only-once

Periodic

Technical specifications

| General information | |
|---------------------|---|
| Order number | 600-310-7AA01 |
| Article name | 1x Counter , 5 V (RS422), 4 MHz, 32 bit |

| | |
|---------------------------------------|---|
| Scope of delivery | 1x Counter , 5 V (RS422), 4 MHz, 32 bit |
| Dimensions (DxWxH) | 110 x 14 x 73 mm |
| Weight | Approx. 70 g |
| Input voltage | 24 V DC |
| from the backplane bus | Yes |
| Sensor supply | 5V ±10 %, 190 mA |
| Current draw | |
| External | Max. 50 mA |
| Internal | Max. 86 mA |
| Power dissipation | 1 W |
| Parameter configuration length | 15 bytes |
| Number of counters | 1 |
| Counter bit depth | 32 bits |
| Input frequency | max. 1 MHz |
| Counting frequency per channel | Max. 4 MHz (for X4 evaluation) |
| Hot-swap capable | Yes |
| 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 |