600-310-7AA01



Counter, 32 Bit

1x 5V, 4 MHz, (RS422)

- 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)

Info

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.

Capturing modes Pulse & directionRotary encoder with double evaluationRotary encoder with quadruple evaluation Counting methods Continuous countingOnce-only countingPeriodic counting Measuring mode Frequency measurementRotational speed measurementPeriod measurement Synchronization OffOnly- oncePeriodic Note: Individual modules cannot be combined with the IO systems of other manufacturers.

Technical data

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
Isolation from the backplane bus	Yes
Sensor supply	5V ±10 %, 190 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

Current draw	
External	Max. 50 mA
Internal	Max. 86 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"