

C-DIAS Digital Input Module

CDI 169-0



with 16 Counter inputs (8-bits each)

The CDI 169-0 has 16 counter inputs, each with an 8-bit width for open collector outputs. The actual input signal can be read (use as digital input). The inputs 1-16 can be used as interrupt and counter inputs. To suppress noise in the signal lines, input filters are provided.

Input specifications

| | | |
|--------------------|-------------------------|---------------|
| Number of ... | 16 | |
| Input signal | GND switching | |
| Pull-up voltage | Typically +24 V | Maximum +30 V |
| Collector current | Typically 2.4 mA | Maximum 3 mA |
| Saturation voltage | Maximum 1V @ 3 mA | |
| Residual current | Maximum 200 µA | |
| Counter frequency | Maximum 1 kHz | |
| Input delay | 50 µs low pass 1. order | |
| Status display | None | |

Functions / operating modes

| | |
|---|--|
| Counter mode (can be set separately for each counter) | Forward / Backward Rising flank / Falling flank / Rising and falling flank Reset counter |
| Counter width | 8 bits |
| Operating modes of inputs | Read inputs (2 x 8 bits) |

Electrical requirements

| | | |
|--|-----------------|---------------|
| Voltage supply from C-DIAS bus | +5 V | |
| Current consumption on the C-Dias bus | Typically 60 mA | Maximum 80 mA |
| Voltage supply from C-DIAS bus | +24 V | |
| Current consumption on the C-Dias bus; all inputs active | Typically 38 mA | Maximum 50 mA |

Miscellaneous

| | | |
|------------------|--------------|--|
| Article number | 12-006-169-0 | |
| Hardware version | 1.x | |

Environmental conditions

| | | |
|-----------------------|--|----------------------|
| Storage temperature | -20 – +85 °C | |
| Operating temperature | 0 – +60 °C | |
| Humidity | 0 - 95 %, non-condensing | |
| EMC stability | Noise immunity according to EN 61000-6-2 (industrial area) Noise emission according to EN 61000-6-4 (industrial area) | |
| Shock resistance | EN 60068-2-27 | 150 m/s ² |
| Protection Type | EN 60529 | IP20 |