



## Features:

- Support CiA 402 device profile and G-code
- 6-axis independent control and pulse output up to 4 MHz
- Pulse output options: Pulse/DIR
- 1 x Spindle Axis Output
- Encoder interfaces (A, B, Z), differential
- EtherCAT Conformance test tool verified
- Operating Temperature -20 to +70 °C

## Specifications

| Pulse Type Motion Control             |                                                                                                                 |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Interface                             | EtherCAT                                                                                                        |
| Drive Profile                         | CiA402, G-code                                                                                                  |
| Number of Motors                      | 6                                                                                                               |
| Spindle Output                        | 1 x Spindle axis (DAC), $\pm 10$ V                                                                              |
| Minimum Communication Cycle           | 500 $\mu$ s                                                                                                     |
| Synchronization Mode                  | DC, SM2, FreeRun                                                                                                |
| Compatible Operation Mode             | PP, CSP, CSV, HM                                                                                                |
| Pulse command Output                  | 100 kHz / 500 kHz / 4 MHz (configurable via object 0x5015, default 100 kHz)                                     |
| Committed I/O Signal                  | Pulse $\pm$ / SING $\pm$ / Home $\pm$ / SVON $\pm$ / Alarm $\pm$ / A $\pm$ / B $\pm$ / Z $\pm$ for each channel |
| Encoder                               |                                                                                                                 |
| Encoder Inputs                        | 6 x Encoder counter (A, B, Z), differential                                                                     |
| Maximum Encoder pulse frequency       | 14 MHz                                                                                                          |
| Positioning Range                     | -2,147,483,648 through 2,147,483,647 pulse (32-bit)                                                             |
| Differential Voltage of Encoder Input | $\pm 5$ V                                                                                                       |
| Encoder Type                          | AB Phase x4, AB Phase x2, CW/CCW x2, CW/CCW, STEP/DIR x2, STEP/DIR                                              |
| General                               |                                                                                                                 |
| Connector                             | Pin Header 2.54 mm, 2x8, 16P                                                                                    |
| Protocol                              | EtherCAT (RJ-45 x 2)                                                                                            |
| Ethernet Standard                     | IEEE 802.3                                                                                                      |
| Transmission Rate                     | 100Mbps                                                                                                         |
| Power Connector                       | 4-pin Power Input/Output & 2-pin FGND                                                                           |
| Power Requirement                     | +19 to +50VDC Power Input (Typ. +24VDC@300mA)                                                                   |
| Power Consumption                     | Min. 7.2 W                                                                                                      |
| LED Indicator                         | PWR, EC IN, EC OUT, RUN, ERROR, M1–M6 (Servo On)                                                                |
| Hardware                              |                                                                                                                 |
| Operating Temperature                 | -20 to +70 °C                                                                                                   |
| Dimension                             | 107.45 x 66 x 30 mm (Without DIN-Rail)                                                                          |
| Weight                                | 370 g                                                                                                           |
| Installation                          | DIN rail                                                                                                        |
| Internal Monitoring                   | Temperature, Voltage, Current, Startup time                                                                     |