



EM7004 | 4-axis interface

The EM7004 EtherCAT module interface is optimised for direct connection of four Servo Drives. The compact module features four integrated incremental encoders, 16 digital 24 V DC inputs and outputs, and four analog ± 10 V outputs. For fast preprocessing, the digital outputs can be connected directly via the four encoders (PLS). This function is parameterisable. All inputs and outputs operate with a 24 V supply. The plug connectors X4, X5, X6 and X7 each feature an encoder input and an analog output. The connectors are galvanically isolated from each other and from the supply voltage. The connectors X0 and X1 with 16 digital inputs as well as the connectors X2 and X3 with 16 digital outputs enable 3-wire connection. Plug X8 is included in the scope of supply.

Technical data	EM7004
Technology	4-axis interface
Digital inputs	16 x 24 V DC
Digital outputs	16 (8 x 0.5 A, 8 x 1.5 A), 24 V DC
Analog outputs	4 x ± 10 V (2 mA)
Encoder inputs	4 x (A, /A, B, /B, gate, latch, ground); A B – isolated RS485 inputs (RS422); 4 x 16 bit quadrature encoder; < 400 kHz
Cycle time	min. 1 ms
Nominal voltage	24 V DC (-15 %/+20 %)
Current consumption power contacts	– (no power contacts)
Current consumption E-bus	typ. 280 mA
Distributed clocks	–
Electrical isolation	500 V (E-bus/signal voltage)
Bit width in the process image	20 byte ENC/PLS input, 28 byte DO/AO/ENC/PLS output
Special features	outputs switchable in relation to counter states, user scaling parameterisable, watchdog parameterisable
Dimensions (W x H x D)	147 mm x 100 mm x 56 mm (with connector)
Weight	approx. 260 g
Operating/storage temperature	0...+55 °C/-25...+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 20/variable
Approvals	CE

Ordering information	included EM/KM plug-in connectors
EM7004-0000	none
EM7004-0002	4 x ZS2001-0002; 4 x ZS2001-0005
EM7004-0004	4 x ZS2001-0004; 4 x ZS2001-0005