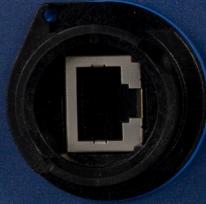


EBIS-ENC4-IO16

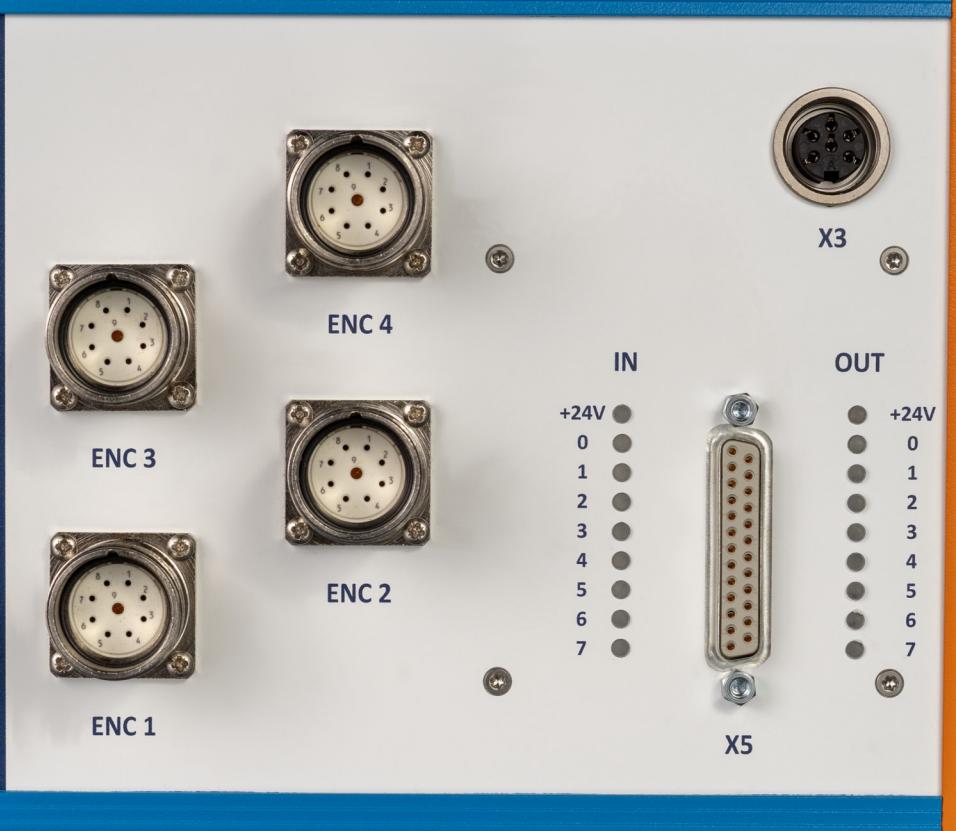
- 24 V
- Connected
- Error



X1



X2



EBIS-ENC4-IO16

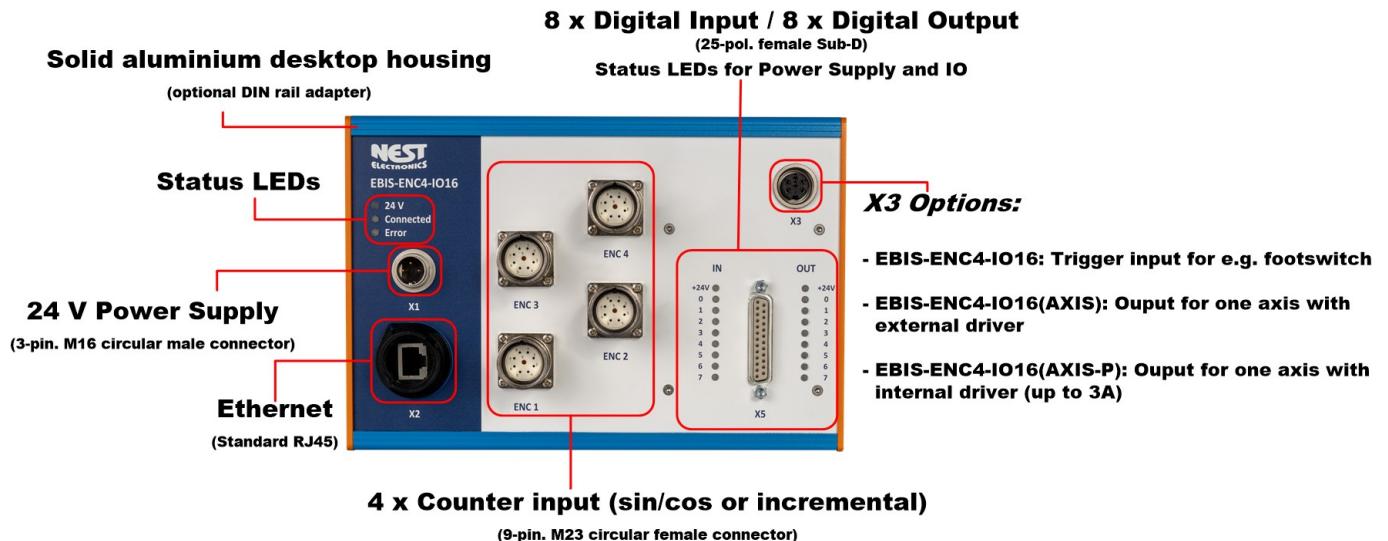
Description

The **EBIS-ENC4-IO16** system is the counter interface of the *EBIS IoT product family*. In addition to the standard features of the *EBIS product series*, the **EBIS-ENC4-IO16** unit has **3 sin/cos and 1 incremental counter inputs** or **4 incremental counter inputs**. Furthermore to the sensor data acquisition, the system provides a **trigger input** (e.g. for footswitch) or **one output to control an axis (X3 Option)**. Further, the digital **PLC interface with 8 dig. inputs and 8 dig. outputs** enables the communication with a PLC and control of extensive automated processes. Due to the available versions and configuration options, a wide range of different sensors can be used and thus a wide variety of applications can be realized.

Applications

- Automotive industry
- Machine tool industry
- Medical production measurement
- Optical industry
- Control technology
- Robotics

EBIS-ENC4-IO16



General Specifications		
Power supply		
Nominal voltage	24V DC	
Voltage supply	18V - 30V DC	
Connector (X1)	3-pin. M16 male connector	
Ethernet		
IP-Address	192.168.0.17x (configurable)	
Connector (X2)	Standard RJ45 connector (optional: IP68)	
Housing		
Aluminium desktop housing	optional: DIN rail adapter	
Dimensions (mm)	224 x 150 x 60	
Communication interfaces		
TCP/IP	EBIS-Protocol	
.NET library		
Web interface	Configuration, Firmware update, etc.	
Cloud Support	MQTT, Azure, AWS	
Safety features		
Status LEDs	Power supply, network status, error	
Encryption protocol	TLS	
Versions		
Type	Description	Order number
EBIS-ENC4-IO16(INC)	- ENC1-ENC4 incremental - 8 x dig. Input/8 x dig. output - X3: Trigger-Input for e.g. footswitch	710
EBIS-ENC4-IO16 (SIN/COS)	- ENC1-ENC3 sin/cos, ENC4 incremental - 8 x dig. Input/8 x dig. output - X3: Trigger-Input for e.g. footswitch	711
EBIS-ENC4-IO16(INC/AXIS)	- ENC1-ENC4 incremental - 8 x dig. Input/8 x dig. output - X3: Output for one axis with external driver	712
EBIS-ENC4-IO16 SIN/COS/AXIS)	- ENC1-ENC3 sin/cos, ENC4 incremental - 8 x dig. Input/8 x dig. output - X3: Output for one axis with external driver	713
EBIS-ENC4-IO16 (INC/AXIS-P)	- ENC1-ENC4 incremental - 8 x dig. Input/8 x dig. output - X3: Output for one axis with internal driver (up to 3A)	714
EBIS-ENC4-IO16(SIN/COS/AXIS-P)	- ENC1-ENC3 sin/cos, ENC4 incremental - 8 x dig. Input/8 x dig. output - X3: Output for one axis with internal driver (up to 3A)	715

EBIS-ENC4-IO16 Specifications ⁽¹⁾	
General	
Connectors (ENC1-ENC4)	9-pin. M23 circular female connector
Power supply	5 V / 250 mA (regulated)
Input (ENC4)	1 x incremental counter input with A, B, Z signal
Differential inputs	TIA/EIA-422-B Standard, TTL
Input hysteresis	35 mV typ.
Max. input frequency	32 MHz
"Open Circuit, Short Circuit, and Terminated Fail-Safe design"	
ESD	± 15 kV HBM ANSI/JEDEC JS-001 ± 8 kV IEC61000-4-2 Contact Gap Discharge ± 15 kV IEC61000-4-2 Air Gap Discharge
Sin/Cos counter inputs (ENC1-ENC3)	
Inputs	3 x sin/cos counter inputs with A, B, Z signal
Differential inputs	10 mV _{pp} - 1 V _{pp} (9 prog. gain) 11μA _{op}
Input hysteresis	5,625° - 9° (depends on interpolation)
Interpolation	1 - 16
Max. input frequency	200 kHz - 3,2 MHz (depends on interpolation)
ESD	2 kV HBM
Incremental inputs (ENC1-ENC3)	
Input (ENC1-ENC4)	3 x incremental counter input with A, B, Z signal
Differential inputs	TIA/EIA-422-B Standard, TTL
Input hysteresis	35 mV typ.
Max. input frequency	32 MHz
"Open Circuit, Short Circuit, and Terminated Fail-Safe design"	
ESD	± 15 kV HBM ANSI/JEDEC JS-001 ± 8 kV IEC61000-4-2 Contact Gap Discharge ± 15 kV IEC61000-4-2 Air Gap Discharge
Digital Inputs/Outputs	
Number of inputs	8
Galvanic isolation	500 V _{AC}
Nominal voltage (V _{SUPPLY})	24 VDC
Power supply	11 V - 35 V
ESD	2,5 kV HBM JESD22-A114-B 1,5 kV CDM ESD STMS.3.1-1999
Informations: Digital interface IEC61131-2 Type 1, PLC interface, Status LEDs, external power supply needed (V _{SUPPLY} and GND)	
Number of outputs	8
Typ	0,625 A High-Side Switch
Galvanic isolation	500 V _{AC}
Nominal voltage (V _{SUPPLY})	24 VDC
Power supply	11 V - 35 V
ESD	2 kV HBM JESD22-A114-B 1 kV CDM ESD STMS.3.1-1999
Informations: Protected against short to V _{SUPPLY} /overload/overvoltage , PLC interface, for all types of resistive, inductive and capacitive loads, Status LEDs, external power supply needed (V _{SUPPLY} and GND)	

⁽¹⁾ Specification depends on version