Pin Assignment

Connector	Pin	Signal	Comment
①	1	Ethernet Tx+	-
	2	Ethernet Rx+	-
	3	Ethernet Tx-	-
	4	Ethernet Rx-	-

Pin assignment of Ethernet interface

Connector	Pin	Function	Comment
②	1	+24 VDC [1]	
	2	+24 VDC [1]	Power supply for interface module and sensors
	3	GND	
	4	GND	
	5	Shield	

Pin assignment of power connection

1) Permissible supply voltage range 11 - 30 V

Connector	Pin	Function	Comment
③	1	External input 1	-
	2	External input 2	-
	3	External input 3	-
	4	External input 4	-
	5	External output 1	-
	6	External output 2	-
	7	External output 3	-
	8	External output 4	-
	9	n.c	-
	10	n.c	-
	11	Voltage output	LLL = +5 V, HLL = +24 V
	12	GND	-

Pin assignment I/0 interface

Connector	Pin	Signal IF2008 ETH	Signal Encoder
4a	1	A+	A+
	2	A-	A-
4b	3	B+	B+
	4	B-	B-
4c	5	R+	R+
	6	R-	R-
4d	7	+24 VDC [1]	n.c
	8	Laser on/off [1]	n.c
4f	9	Multi-function output [1]	n.c
	10	ERROR input [1]	n.c
4g	11	+5 VDC	+5 VDC
4h	12	GND	GND

Pin assignment encoder interface

1) Only for sensors

Connector	Pin	Signal IF2008 ETH	Signal ILD 1420	Signal ILD 1900	Signal ILD 2300	Signal ILR 2250	Signal IFC 24xx	Signal IMS 5x00
4a	1	TRG+	n.c	TRG+	TRG+	n.c	n.c	n.c.
	2	TRG-	n.c	TRG-	TRG-	n.c	n.c	n.c
	3	Tx+	Rx+	Rx+	Rx+	Rx+	Tx+	Tx+
4b	4	Tx-	Rx-	Rx-	Rx-	Rx-	Tx-	Tx-
	5	Rx+	Tx+	Tx+	Tx+	Tx+	Rx+	Rx+
4c	6	Rx-	Tx-	Tx-	Tx-	Tx-	Rx-	Rx-
4d	7	+24 VDC	+24 VDC	+24 VDC	+24 VDC and Laser on/off+	+24 VDC	n.c.	n.c.
4e	8	Laser on/off	Laser on/off	Laser on/off	Laser on/off-	n.c.	n.c	n.c.
4f	9	Multi-function output	Multi-function input	Multi-function input	n.c.	n.c.	TRG+ (HLL)	TRG+ (HLL)
4g	10	ERROR-input	ERROR-output	n.c.	n.c	Trig	n.c.	n.c.
4h	11	+ VDC (only for encoder)	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.
	12	GND	GND	GND	GND	GND	GND	GND

Pin assignment sensor interface

Intended Use

The IF2008 ETH interface module is designed for use in industrial and laboratory applications. It is used to convert the MICRO-EPSILON internal sensor protocol (RS422) to Ethernet.

The IF2008 ETH interface module must only be operated within the limits specified in the technical data. The IF2008 ETH interface module must be used in such a way that no persons are endangered or machines and other material goods are damaged in the event of malfunction or total failure of the IF2008 ETH interface module. Take additional precautions for safety and damage prevention in case of safety-related applications.

Warnings

Connect the power supply and the display/output device according to the safety regulations for electrical equipment.
> Risk of injury, damage to or destruction of the interface module

The supply voltage must not exceed the specified limits.
> Risk of injury, damage to or destruction of the interface module

Avoid shocks and impacts to the interface module.
> Damage to or destruction of the interface module

Notes on CE Marking

The following apply to the IF2008 ETH interface module:
- EU Directive 2014/30/EU
- EU Directive 2011/65/EU

Products which carry the CE mark satisfy the requirements of the EU directives cited and the relevant applicable harmonized European standards (EN). The measuring system is designed for use in industrial environments and laboratory applications.
The EU Declaration of Conformity and the technical documentation are available to the responsible authorities according to EU Directives.
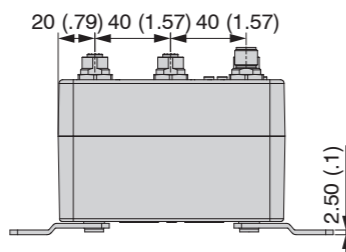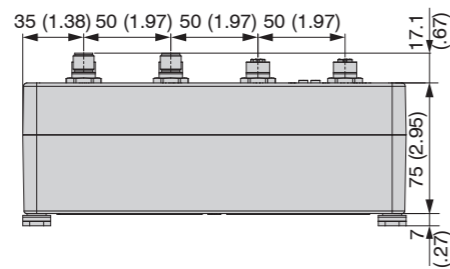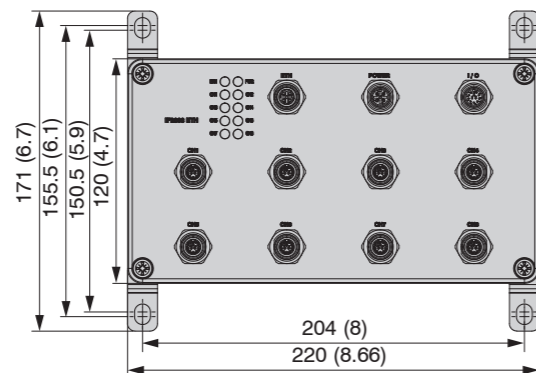
Proper Environment

Protection class: IP65 (When all plugs are connected.)
- Temperature range:
  - Operation: 0 ... +50 °C (+32 ... +122 °F)
  - Storage: +5 ... +50 °C (+41 ... +122 °F)
- Humidity: 5 ... 95 % (non-condensing)
- Ambient pressure: Atmospheric pressure

Installation and Assembly

ℹ Ensure careful handling during installation and operation.

*Dimensional drawings IF2008 ETH interface module, dimensions in mm (inches)*

LED Overview

LED	LED color	Description
①	Off	Power supply off
	Green	Interface module is ready for operation
	Orange	Interface module is in bootloader/flash mode
	Red	Initialization of the interface module
②	Off	No Ethernet connection
	Orange	Connection between PC and interface module (100 Mbps)
	Flashing	Data transmission between PC and interface module
③	Off	No sensor/encoder selected
	Green	Interface set for sensor
	Orange	Interface set for sensor
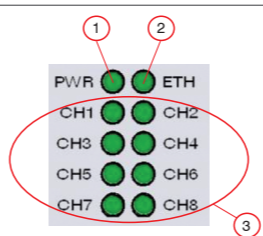
Description of status LEDs IF2008 ETH interface module

Connector Overview
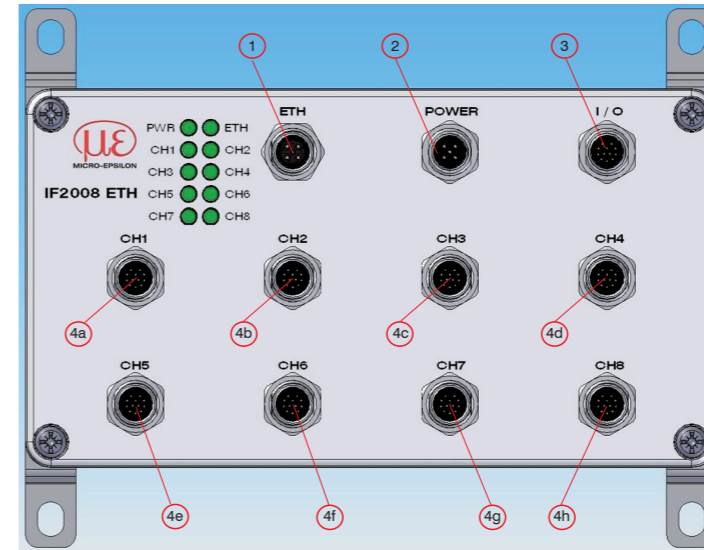
Plug-in connections IF2008 ETH interface modul

Connector	Description
ETH	Flange socket, 4-pin, type Binder 09 3732 500 04 for Ethernet connection
POWER	Flange connector, 5-pin, type Binder 09 3441 600 05 for power connection
I/O	Flange connector, 12-pin, type Binder 09 3491 600 12 for power connection
CH1 - CH8	Flange socket, 12-pin, type Binder 09 3492 600 12 for sensor/encoder connection

Overview of plug-in connections

You can find more information about the IF2008/ETH interface in the operating instructions. They are available Online at:

www.micro-epsilon.com/download/manuals/man--IF2008-ETH--en.pdf