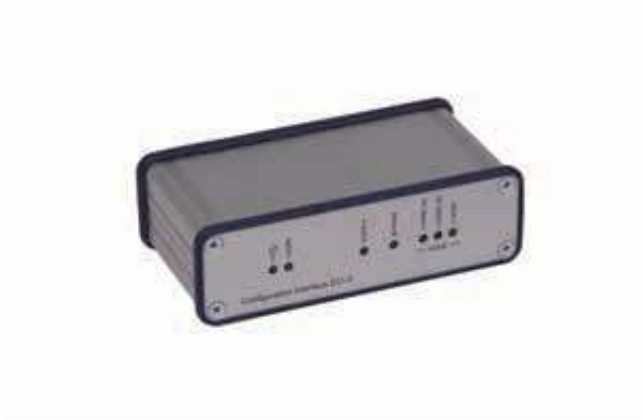
Configuration Interface ECI-3



- **Can be used on site for:**
  - **parameter modification**
  - **firmware update**
  - **adjustment of inputs and outputs**
- **Can be connected via USB**

Characteristics

The ECI-3 configuration interface enables connection of GHM HONSBERG sensors to the USB port of a computer.
All sensors of the OMNI, FLEX, and LABO families, as well as other sensors which contain a microcontroller are supported.

Both 2-wire and 3-wire sensors are supported.

In combination with the 'HI-Tools' Windows software, it enables

- the modification of all the sensor's configuration settings
- the reading of measured values
- the adjustment of inputs and outputs
- firmware updates

Technical data

Auxiliary voltage	Supply of the interface via USB 3-wire sensors also require a supply according to the sensor specifications in the range of 10 – 30 V (Observe the sensor data sheet!)
Connections	
Sensor	Device socket M12x1, 5-pin
Supply	Device connector M12x1, 5pole
USB	USB jack type B
Operating temperature	0..+50 °C
Storage temperature	-20..+80 °C
Dimensions	109 mm (W) x 67.5 mm (D) x 34 mm (H)
Housing material	Aluminium
Ingress protection	IP 40
Weight	0.16 kg (interface without accessories) 1.02 kg (case, incl. contents)
Conformity	CE

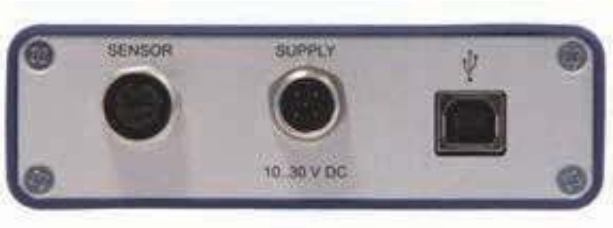
Handling and operation

Operating and display elements

Front:

LED	Meaning
USB	Illuminates with established USB connection
COMM	Blinks during USB communication
SUPPLY	Indicates that the supply voltage is present at the sensor connection
BYPASS	Illuminates when there is no communication, pins of sensor and supply connection are connected to each other
3-WIRE (A)	MODE LEDs indicate the current operating mode of the interface. This depends on the connected sensor and is automatically adjusted by the software.
3-WIRE (B)	
2-WIRE	

Rear side:



SENSOR	M12x1 socket, 5-pin for sensor connection
SUPPLY	M12x1 plug connector, 5-pin for supply line connection (only for 3-wire sensors) Pin 1 = +V Pin 3 = 0 V The assignment of the remaining pins depends on the connected sensor
USB	USB B-socket for connection to the USB port of the computer

Commissioning

The configuration interface is intended for temporary connection to the application. Permanent installation in the system is not intended.

The interface is initially connected to the USB port of the computer using the supplied USB cable. The power supply of the interface takes place via the USB port. Additional auxiliary voltage is not necessary at first. The drivers required for operation are provided on the supplied USB stick and are installed in the usual manner.

Connection of the sensors takes place at the 'Sensor' port with the supplied M12x1 extension cable. The supplied adapter can be used for connection of sensors with a valve connector.

No additional connections are necessary for operation with **2-wire sensors**. The supply of sensors and interface takes place from the USB port.

An amperemeter can be connected to Pin 1 and 2 of the SENSOR socket to measure the loop current. If the BYPASS LED on the front illuminates, the current can be read here. It must be ensured that the voltage drop-off at the amperemeter is not higher than 0.5 V, which means the internal resistance of the measuring device may not be higher than 25 Ohm. Modern multimeters with a digital display normally satisfy this requirement. No damage can occur with high voltages within the supply voltage area, but the display of the loop current becomes faulty.

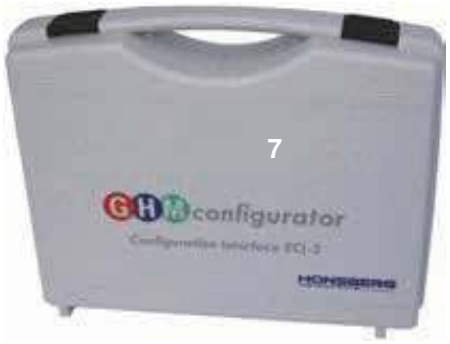
With **3-wire sensors** the supply voltage of the sensor must be connected to the 'Supply' connection. For this purpose, the available supply line of the sensor or an optionally available power supply plug can be used. The supply voltage must match the specifications of the connected sensor. If the supply line has a 4-pin M12x1 round plug connector without middle hole, the supplied adapter K04-05 must be used; otherwise connection with the 5-pin plug of the interface is not possible. 4-pole leads with a middle hole can be used without an adapter.
In the inactive state (without communication), the interface behaves entirely neutral (BYPASS LED on the front illuminates). All signals of the sensor are still available to the application. During communication between computer and sensor, the signal lines are separated in the interface, so that in this state the sensor's output signals are not available.

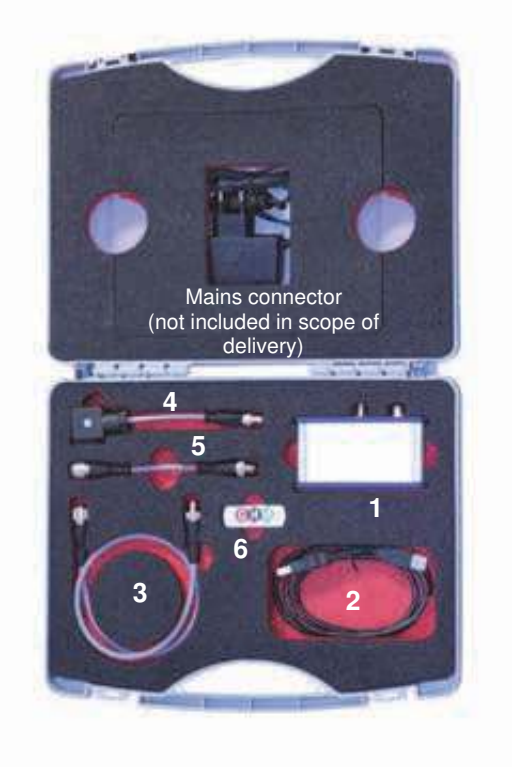
Operation of the interface takes place using the HI-Tools program package. The software is provided in the latest respective version on the supplied USB stick. Updates can be downloaded free of charge from the download area of the GHM website .www.ghm-messtechnik.de.

The software can be used for all standard sensors. Special software is available under certain circumstances for customer-specific sensors or for special requirements. In case of uncertainty, contact GHM Sales.

Ordering code

Configuration Interface (for scope of delivery, see the diagram below)	**ECI-3**





Scope of delivery:
1. ECI-3 configuration interface
2. 1.8 m USB cable
3. 500 mm M12x1 extension
4. Valve connector adapter
5. Adapter K04-05
6. SUB stick with driver software
7. Carry case

A mains connector is not included in the scope of delivery.

Accessories:

Mains connector 24 V DC / 0.75 A with round plug connector M12x1 incl. interchangeable adapters for universal use		**EPWR24-1**
Mains connector 24 V DC / 0.5 A with round plug connector M12x1 with Euro plug		**EPWR24**