

BY000002

IoT-Gateway

- / Monitoring and analyses of machines and processes**
- / Easy remote access & device updates**
- / Preventive maintenance**
- / Machine data detection**
- / High IT security**
- / DIN rail mounting**



IoT gateway master module for Industry 4.0 / IoT and IIoT

Technical Data

Processor	Colibri IMX7D 1GB TM 32-Bit, 2 x ARM Cortex-A7 CPU ARM®, 1 x Cortex-M4 CPU Cores®
Memory	1GBD DDR3L RAM, 4GB eMMC
Interfaces	2 x 100MbE, 2 x USB2.0 Host, 1 x USB2.0 Device, 1 x CAN, 1 x RS485, up to 6 x programmable inputs / outputs, up to 4 x analog in (4...20mA/0...10V)
Operating system	IIoT operating system SIINEOS
Minutes	Modbus, CAN, MQTT, HTTP, Cloud of Things, OPC U/A, DB/SQL
HMI	status LEDs
Rated voltage	24V DC ±10%
Max. power consumption	120 W
Reverse polarity protected	Ja
Overload protected	Ja
Protection class (IP)	IP20
Ambient temperature	0... +50°C
Width	132mm
Height	110mm
Depth	25mm
Housing material	Polyamide
Ambient temperature	10 ... +50°C
Storage temperature	-20... +85°C

Description:

The ipf-HUB is an IoT gateway master module and was specially designed for applications in the field of Industry 4.0 / IoT and IIoT. With the ipf-HUB, the direct various sensors for monitoring processes and machines is possible. The data is then processed directly in the device and made available via various interfaces wireless or wired. Using standard interfaces, the module can be used in and on existing machines and systems to ensure the secure connection of the production-side control with the company's internal IT environment. The ipf-HUB can be upgraded in terms of the number of sensors, minutes and interfaces via expansion modules.

Connection assignment:

Power supply / digital and analog interface:

Clamp 24V DC		Clamp IO1		Clamp IO2	
1	GND	1	GND	1	GND
2	GND	2	AD/IO1	2	AD/IO3
3	+24V	3	AD/IO2	3	AD/IO4
4	+24V	4	D/IO5	4	D/IO6

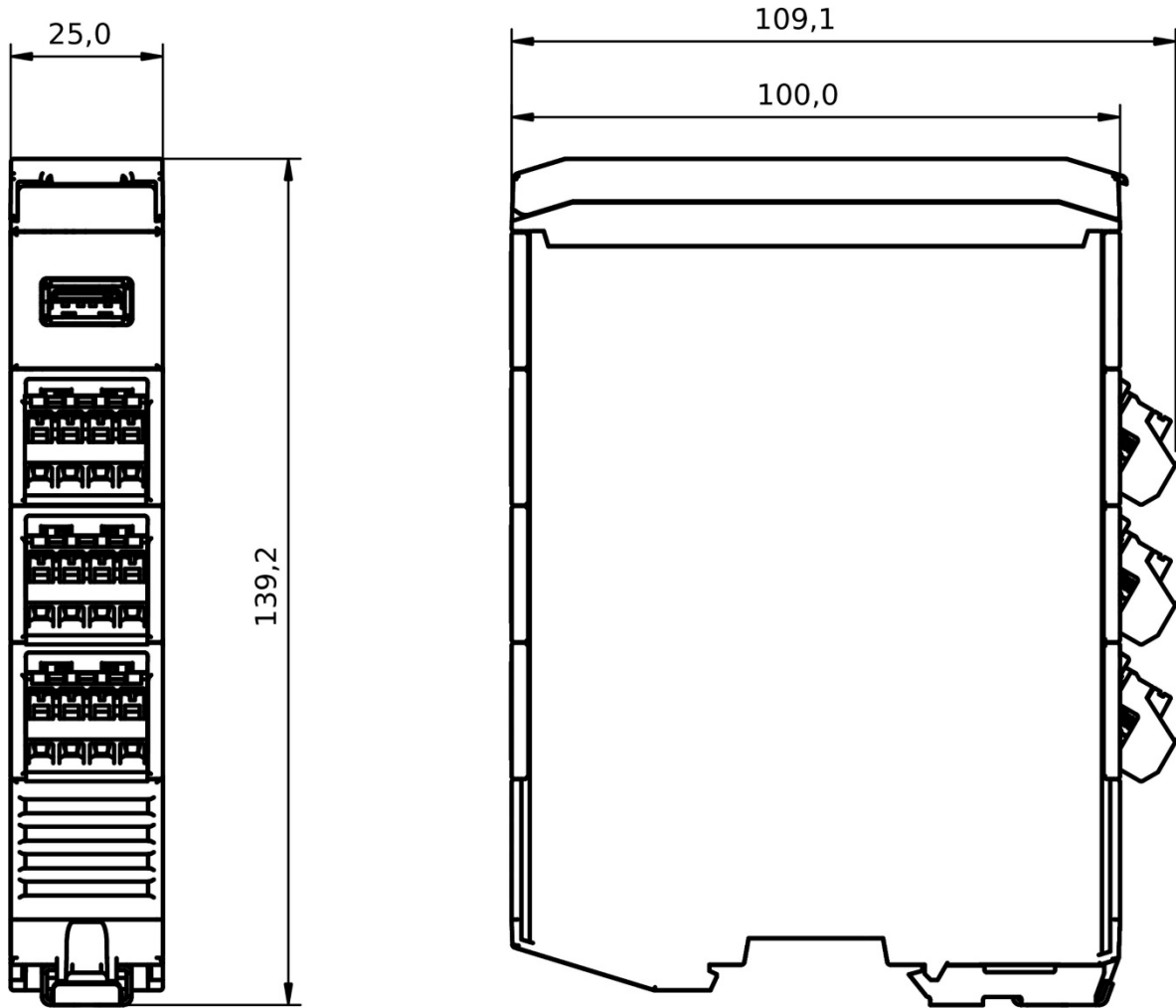
CAN Interface:

Pin	Signal	Description
1	CAN_H	CAN_H bus cable (dominant high)
2	CAN_L	CAN_L bus cable (dominant low)
3	CAN_GND	Ground / 0V / V-
4	–	Not assigned
5	–	Not assigned
6	–	Not assigned
7	GND	Ground / 0V / V-
8	24 V DC	Power supply

RS485 Interface:

Pin	Signal	Description
1	–	Not assigned
2	–	Not assigned
3	–	Not assigned
4	D1/B/B'	Transceiver Terminal 1, V1 voltage (V1 > V0 for binary 1 [OFF] status)
5	D0/A/A'	Transceiver Terminal 0, V0 voltage (V0 > V1 for binary 0 [ON] status)
6	–	Not assigned
7	24 V	Power supply
8	GND	Ground / 0 V / V-

Dimensional drawing



Safety instruction:

Before commissioning, please make sure that all safety instructions listed in the product documentation, if applicable, have been observed! If there is a direct impact on personal safety, the use of these products is prohibited.

Recycling Note:

After using this product, it must be disposed of separately as electronic waste in accordance with the current disposal regulations of your county, state and country.