RG-DIN

DIN-rail mounting IoT gateway and data logger

RG-DIN is a small but powerful DIN-rail mounting bridge, enabling for connecting field buses and analog/digital IOs to the internet and cloud services through Wi-Fi and cellular protocols.

BLE connectivity is also supported in order to forward data to mobile APPs.

Configuration process, including setting PDUs, thresholds, time steps and cloud parameters, is made easy through an embedded web-application and NFC interface.

Upon request, development SDK is provided, enabling customers to build their specific application on a validated hardware platform.
Full OEM branding service is also available.

Bridge the field to Wi-Fi and Cellular

Simple no-code configuration

Customizable Modular design

MAIN APPLICATIONS

- **Modbus-to-Cloud monitoring and control**
- **Modbus data logging**
- **Remote machine monitoring and control**
- **Energy monitor and optimization**
- **Lightweight automations**
- **Cabled sensing replacement**

KEY FEATURES

- Hardware-level configuration of several wireless connectivity options, including Wi-Fi, BLE, cellular NB-IoT/Cat-M1, Cat-1, 5G nr+
- Field monitoring configuration upon request, including RS-485/Modbus, RS-232, analog and digital IOs
- Small form factor, down to 1x DIN module when supporting a single wireless and wired connectivity options

SPECIFICATIONS

Power Supply (Vin)	12V to 24V (up to 36V)
Wireless Protocols	Wi-Fi (2.4 GHz), BLE 5.0, NFC, NB-IoT, Cat-M1, 5G nr+, 2.4 GHz mesh network, 868/915 star network
Wired Connectivity	RS-232, RS-485, CAN BUS
Digital IOs	0 ÷ Vin V
Analog Inputs	0-10V, 4-20 mA
Operating T Range	-10°C to +50°C
Size (1x DIN)	18.0 x 90.0 x 58.0 mm

CONFIGURATIONS

The main RG-DIN assembly-level configurations are detailed in the table below.

Additional configurations and networking options (e.g. 2.4 GHz mesh, 868/915 sub-GHz) can be integrated upon customer request.

Wireless Configuration						Wired Configuration				Size	Ordering code
Wi-Fi	BLE	NFC	NB/M1	Cat-1	5G nr+	RS-485	RS-232	CAN	IOs		
X	X*	X*				X			1x	1 DIN	RG-DIN-W04
X**	X*	X*	X			X			1x	1 DIN	RG-DIN-WN4
X**	X*	X*		X		X			1x	2 DIN	RG-DIN-W14
X	X*	X*			X***	X			1x	1 DIN	RG-DIN-WR4
X	X*	X*					X		1x	1 DIN	RG-DIN-W02
X	X*	X*						X	1x	1 DIN	RG-DIN-W0C
X	X*	X*							3x	1 DIN	RG-DIN-W0A

* Option for future use, custom implementation upon request.

** Local configuration only – no cloud communication.

*** Supports 5G nr+ mesh protocol, to be configured as sink (data forwarded on Wi-Fi network) or routing role.
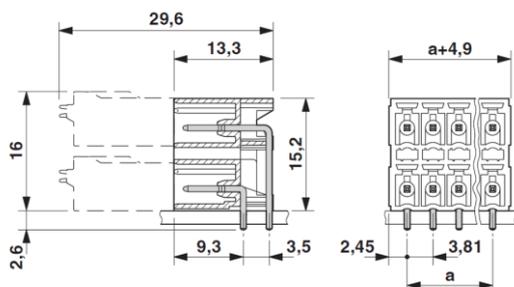
FIELD CONNECTOR

The Field Connector pinout, including pin positioning and mapping, is represented in the picture below.
Each device comes with two 1x3 plug-in connectors compatible with the Field Connector terminal block.

Field Connector - position and mapping - frontal view

4 – IO0 [485-A]	5 - GND	6 – IO1 [485-B]
1 – VIN	2 - GND	3 – IO2

ANTENNA

RG-DIN is available with either an internal antenna or an external antenna option.
When selecting the external antenna variant, the RG-DIN device includes a female SMA connector for primary wireless connectivity.
The external antenna is sold separately.

Female SMA RF connector