



# PROFINET IO to Modbus Gateway ICDM-RX/PN1-2DB9/RJ45-DIN

- DIN-rail mounting and DB9 connectors
- PROFINET IO to and from Modbus TCP, Modbus ASCII, Modbus RTU and Modbus to Modbus communication
- Advanced Modbus gateway and routing capabilities
- Data Mapping sub-system and a built-in Modbus concentrator
- Web-based configuration
- RS-232/422/485 software selectable interfaces
- NEMA TS2 Certified

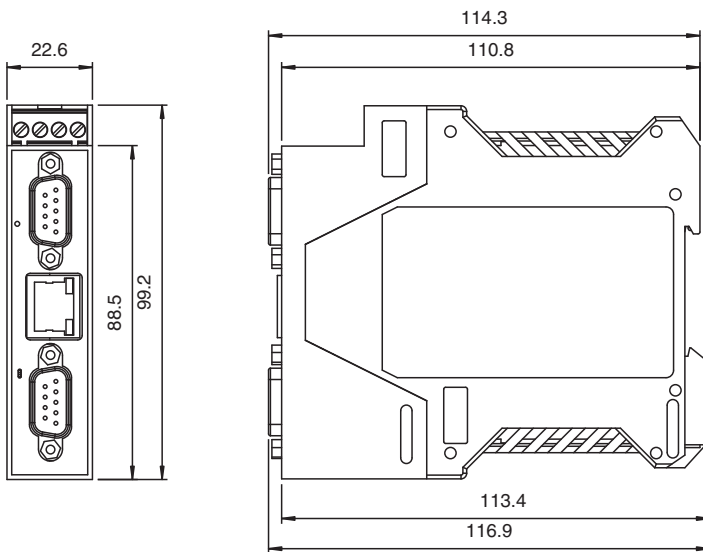
## PROFINET IO to Modbus Gateway 2-port DIN rail DB9



### Function

The ICDM-RX/EN1 gateway enables the connection of serial devices (RS-232 / RS-422 / RS-485) such as barcode scanners, RFID readers and weigh scales to both PROFINET IO and Modbus networks. It combines an PROFINET IO interface with a Modbus gateway functionality and a built-in programmable data mapping sub-system, that ties everything together and doubles as a Modbus concentrator. The embedded web pages provide extensive diagnostics, intuitive and flexible configuration options, secure interfaces and numerous maintenance options. The result is a highly flexible gateway that allows full integration of PROFINET IO controllers into simple or complex Modbus networks. PROFINET IO controllers such as PLCs, HMIs, SCADAs and OPC servers can communicate to almost any Modbus gateway or client, either locally or remotely.

### Dimensions



### Technical Data

<b>General specifications</b>		
UL File Number		E360395
<b>Functional safety related parameters</b>		
MTBF		46.3 a
<b>Indicators/operating means</b>		
LED indication		see manual
<b>Electrical specifications</b>		
Rated operating voltage	$U_e$	5 ... 30 V DC
General information		Redundant power
Nominal voltage		24 V DC

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

## Technical Data

<b>Interface</b>	
Interface type	Software selectable interfaces: RS-232 , RS-422 , RS-485 (2 and 4-wire)
Physical	2 x DB9
Protocol	MODBUS RTU
Supported baud rates	300 bps to 230Kbps
<b>Interface 1</b>	
Interface type	Industrial Ethernet
Physical	1 x RJ45
Protocol	PROFINET IO
Additional protocols	ARP, BOOTP, DHCP/RARP, HTTP, HTTPS, SSH, SSL/TLS, ICMP, RFC 1006 (ISO over TCP), SNMP (MIB-II), TCP/IP & UDP socket services, Telnet, and TFTP, and supports IP multicast data transmission
Transfer rate	10/100 Mbps
<b>Directive conformity</b>	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61000-6-2:2005 , EN 610006-4:2007 , EN 610006-4/A1:2011
RoHS	EN IEC 63000:2018
<b>Standard conformity</b>	
Degree of protection	NEMA TS2
Electrical safety	CSA C22.2 No. 60950 / UL60950
Emitted interference	EN 61000-6-4, EN 55032, FCC Part 15 Subpart B, ICES-003, AS/NZS CISPR 32
Noise immunity	EN 61000-6-2 , EN 55024
<b>Ambient conditions</b>	
Ambient temperature	-40 ... 75 °C (-40 ... 167 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Relative humidity	max. 95 %
Altitude	0 ... 3048 m
<b>Mechanical specifications</b>	
Housing length	116.8 mm
Housing width	22.9 mm
Housing height	99.1 mm
Degree of protection	IP20
Connection	Power Supply: screw terminals Fieldbus: 1 x RJ45 Inputs/outputs: 2 x DB9
<b>Material</b>	
Housing	Polyamide, UL94V-0
Mass	136g
Construction type	Cabinet module
Mounting	DIN mounting rail

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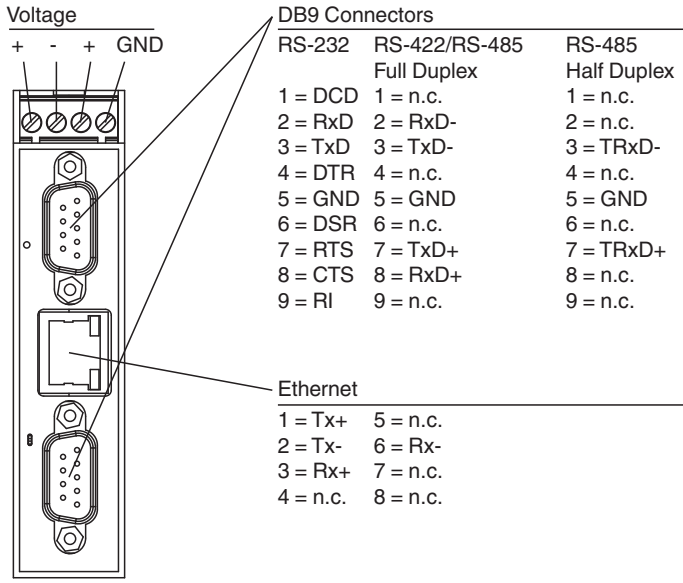
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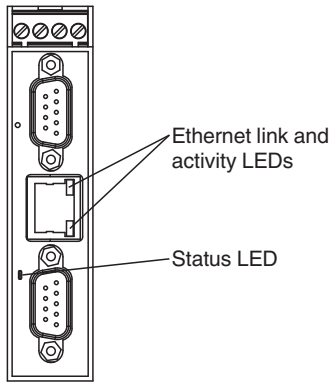
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 **PEPPERL+FUCHS**

**Connection**



**Assembly**



**Accessories**

	<b>V45-G-C5-GN1M-PUR-E1S</b>	Ethernet bus cable male cordset single-ended RJ45, 4-pin, PUR cable green, Cat5e, shielded, UL approved, drag chain suitable
	<b>V45-G-C5-GN3M-PUR-E1S</b>	Ethernet bus cable male cordset single-ended RJ45, 4-pin, PUR cable green, Cat5e, shielded, UL approved, drag chain suitable
	<b>V45-G-C5-GN10M-PUR-E1S</b>	Ethernet bus cable male cordset single-ended RJ45, 4-pin, PUR cable green, Cat5e, shielded, UL approved, drag chain suitable
	<b>V45-G-C5-GN1M-PUR-E1S-V45-G</b>	Ethernet bus cable RJ45 to RJ45 PROFINET-coded, 4-pin, PUR cable green, Cat5e, shielded, UL approved, drag chain suitable
	<b>V45-G-C5-GN3M-PUR-E1S-V45-G</b>	Ethernet bus cable RJ45 to RJ45 PROFINET-coded, 4-pin, PUR cable green, Cat5e, shielded, UL approved, drag chain suitable
	<b>V45-G-C5-GN10M-PUR-E1S-V45-G</b>	Ethernet bus cable RJ45 to RJ45 PROFINET-coded, 4-pin, PUR cable green, Cat5e, shielded, UL approved, drag chain suitable
	<b>V45-G-C5-GN20M-PUR-E1S-V45-G</b>	Ethernet bus cable RJ45 to RJ45 PROFINET-coded, 4-pin, PUR cable green, Cat5e, shielded, UL approved, drag chain suitable

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