



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

- DIN-rail mounting and screw terminal connections
- 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

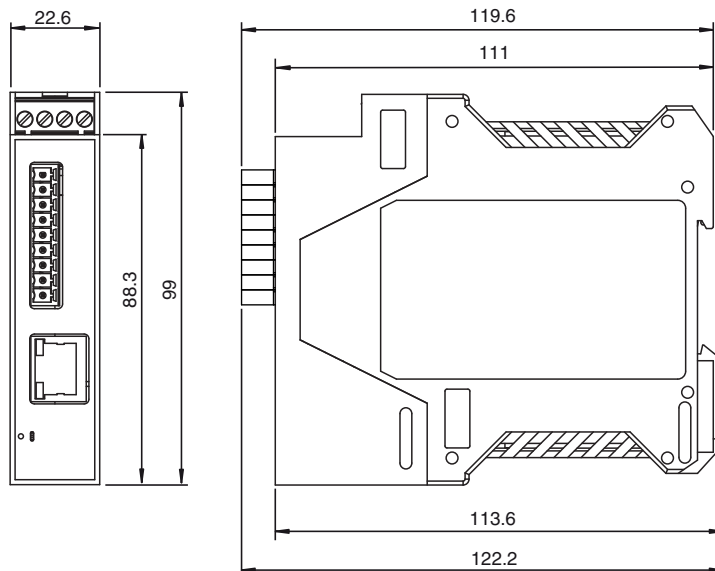
## PROFINET IO to Modbus Gateway 1-port DIN Rail Screw Terminal



### 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

#### General specifications

UL File Number E360395

#### Functional safety related parameters

MTBF 61.4 a

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

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## Technical Data

<b>Indicators/operating means</b>		
LED indication		see manual
<b>Electrical specifications</b>		
Rated operating voltage	U <sub>e</sub>	5 ... 30 V DC
General information		Redundant power
Nominal voltage		24 V DC
<b>Interface</b>		
Interface type		Software selectable interfaces: RS-232 , RS-422 , RS-485 (2 and 4-wire)
Physical		1 x screw terminal
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. 61010-1-12 / CSA C22.2 No. 61010-1-201 UL 61010-1 / UL 61010-1-201
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
<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		119.3 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: 9-pin screw terminal block
<b>Material</b>		
Housing		Polyamide, UL94V-0
Mass		113.4g
Construction type		Cabinet module
Mounting		DIN mounting rail

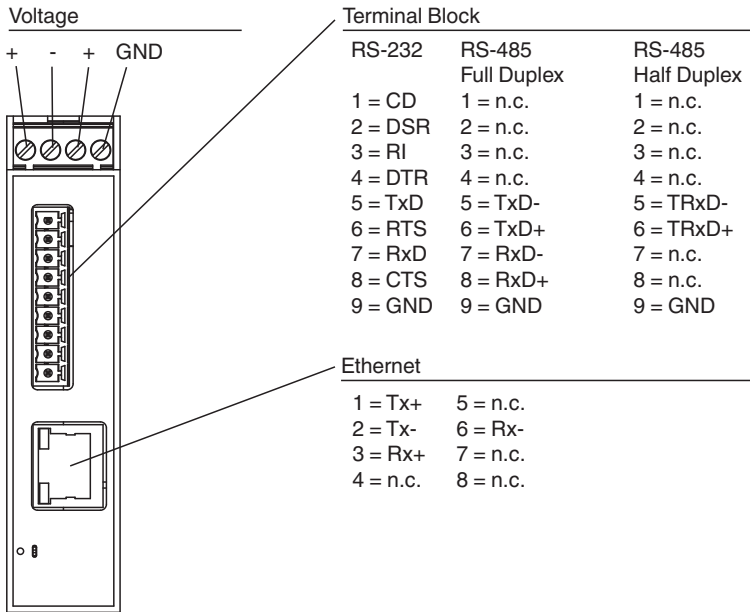
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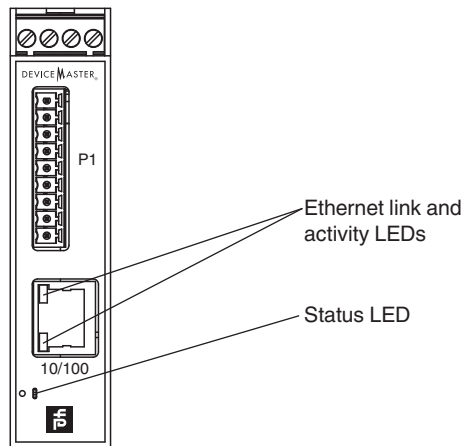
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Connection



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

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**Accessories**

	<p><b>V45-G-C5-GN20M-PUR-E1S-V45-G</b></p>	<p>Ethernet bus cable RJ45 to RJ45 PROFINET-coded, 4-pin, PUR cable green, Cat5e, shielded, UL approved, drag chain suitable</p>
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