

GS20-PN-RS

Embedded PROFINET IO RT **IRT** **MRP** Interface Module



Introduction

The GS20-PN-RS is a high-performance PROFINET interface module powered by the **Siemens ERTEC 200P-3 ASIC**. Designed for seamless integration via a simple **UART** host interface, it provides full hardware support for **IRT (Isochronous Real-Time)** and **MRP (Media Redundancy Protocol)**.

High Real-Time Performance

The module ensures full compatibility with PROFINET IRT networks, providing the deterministic communication required for industrial control.



Industrial Reliability

Supports MRP for ring redundancy and zero downtime. High EMI resistance ensures stable data transmission and reliable operation in harsh industrial environments.



Ease of Use

Rapidly deploy via SST-PNS-CFG software. The internal stack and UART interface enable seamless integration without the need for complex protocol programming.



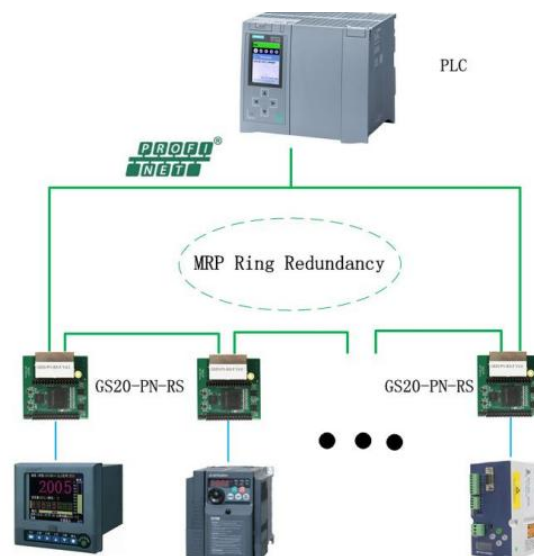
Wide Range of Applications

Easily add PROFINET to serial-based drives and sensors. Its compact, future-proof architecture is the ideal solution for IIoT-ready hardware modernization.



Typical Application

The GS20-PN-RS module connects serial-based field devices to PROFINET networks, enabling high-speed real-time data exchange and deterministic control between the Controller and the device network.

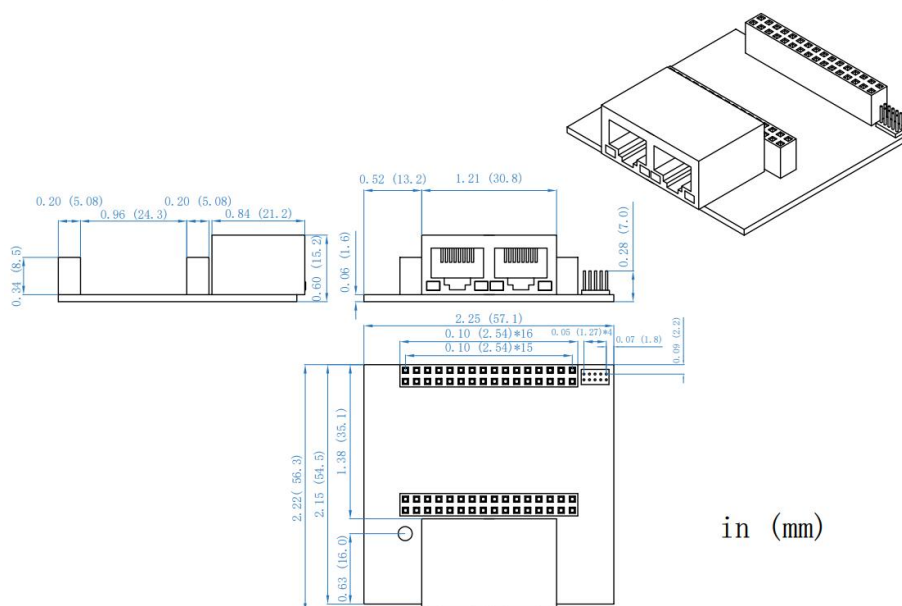


Technical Specifications

PROFINET Features	
Operation Mode	PROFINET Device
Ethernet Ports	2 Ports for the PROFINET Interface
ASIC Chipset	Siemens ERTEC 200P-3
PROFINET Supported Services	RT, IRT(Isochronous Real-Time)
Network Redundancy	MRP (Media Redundancy Protocol)
Maximum Bytes	1440 Bytes (Input/Output)
Configuration Tool	SST-PNS-CFG Configuration Software
UART Features	
Operation Mode	Proprietary Serial / User-Defined Protocol
Host Interface	UART (TTL Level)
Baud Rate	1200 bps to 460800 bps
Data Integrity	Integrated CRC16 Verification
Electrical / Environmental	
DC Input Voltage	3.3 VDC ($\pm 5\%$)
Physical	
Dimensions (W x H x D)	2.22 in $\times$ 0.60 in $\times$ 2.25 in (56.3 mm $\times$ 15.2 mm $\times$ 57.1 mm)
Ethernet Ports	2 Ports, 10/100 Base-T, RJ45 Connector

Dimensions

Unit: Inch (mm)



Product Recommendations

Model Name	Network Interface 1	Network Interface 2
GS11-EI	EtherNet/IP	UART
GS20-DP-MS	PROFIBUS DP	UART