



TECHNICAL DATA SHEET

Siemens S7-1200 G2 PLC Training System with ET 200SP Remote I/O Expansion

Overview

The Rising Edge Automation Siemens S7-1200 G2 PLC Training System with ET 200SP Remote I/O Expansion extends the core training platform with distributed industrial I/O, providing learners with practical experience of modern decentralised automation architectures.

Built using genuine Siemens SIMATIC hardware, the system introduces remote PROFINET I/O concepts commonly used throughout manufacturing, process automation and machine building. Learners gain hands-on experience configuring distributed devices, mapping remote inputs and outputs, diagnosing network communications, and developing scalable automation solutions.

The expansion has been designed specifically for colleges, universities, apprenticeship providers, and industrial training environments seeking a more advanced industrial networking platform.

Additional Learning Outcomes

- Distributed PROFINET I/O
- Remote device commissioning
- Hardware configuration within TIA Portal
- Industrial Ethernet diagnostics
- Remote digital outputs
- Network fault finding
- Scalable automation architectures

Key Features

- SIMATIC S7-1200 G2 controller
- MTP700 Unified multi-touch HMI
- Integrated industrial Ethernet networking
- Industrial safety relay
- Digital and analogue I/O
- Desktop portable enclosure
- Siemens ET 200SP Distributed I/O
- PROFINET Remote Communications
- Modular Industrial I/O Platform
- Advanced Network Diagnostics
- Industrial Distributed Control

Technical Specifications

Parameter	Specification
Control System	
PLC	Siemens SIMATIC S7-1200 G2 CPU 1214C DC/DC/DC
Analogue Expansion	Siemens SB1231 4-Channel Analogue Input
HMI	Siemens SIMATIC MTP700 Unified
Safety Relay	PILZ PNOZ S3
Ethernet Switch	Industrial 5-Port Ethernet Switch
Remote I/O Expansion	
Remote I/O System	Siemens SIMATIC ET 200SP
Interface Module	Siemens ET 200SP PROFINET Interface Module
Base Unit	Siemens ET 200SP Base Unit
Digital Output Module	Siemens ET 200SP Digital Output Module
Server Module	Siemens ET 200SP Server Module
Communications	
PLC Network	PROFINET
Remote I/O Network	PROFINET
Industrial Switch	Integrated 5-Port Ethernet Switch
Programming Port	Front RJ45 Ethernet
USB Service Port	Front USB-C
Electrical	
Supply Voltage	24 VDC
External Power Supply	100–240 VAC to 24 VDC
Maximum Output	72 W

Environmental	
Operating Temperature	0°C to +50°C
Storage Temperature	-20°C to +60°C
Relative Humidity	Maximum 90% RH (non-condensing)
Installation	Indoor use only
Mechanical Construction	
Enclosure	Custom fabricated steel enclosure
Finish	Matte black powder-coated
Mounting	Desktop portable
Internal Construction	Industrial DIN rail assembly
Wiring	Professionally terminated industrial control wiring
Software Compatibility	
Engineering Software	Siemens TIA Portal, STEP 7 Basic, WinCC Unified Engineering
Remote I/O Configuration	ET 200SP Hardware Configuration and PROFINET Device Configuration