

# S7-1500 PLC Bundle HART – Educational 589669 (3539-P0)

**FESTO**

LabVolt Series

Datasheet



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Festo Didactic  
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04/2025



## General Description

This bundle includes a Siemens S7-1500 PLC, a Distributed I/O Module (HART), one copy of STEP 7 Software, one copy of WinCC and one copy of the Process Device Manager Software.

## List of Equipment

Qty	Description	Model number
1	Programmable Logic Controller (S7-1516) _____	589671 (46962-00)
1	Distributed I/O Module (HART) _____	589674 (46976-00)
1	TIA Portal PLC Software (Step 7 Professional) with Process Device Manager (PDM) _____	589676 (46986-00)

## Additional Equipment Required to Perform the Exercises (Purchased separately)

Qty	Description	Model number
1	Touch-Screen Computer – Large _____	589677 (46299-A0)

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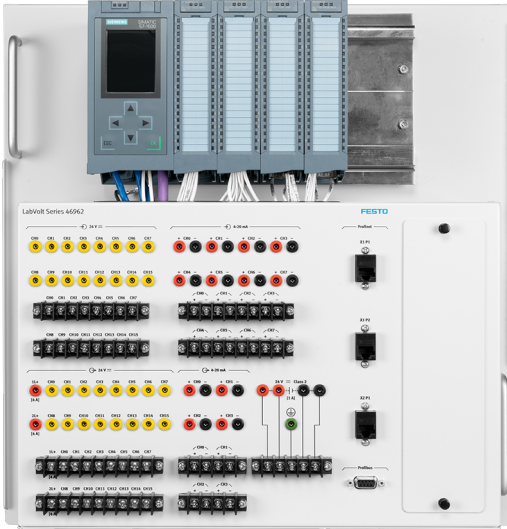
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## Equipment Description

### Programmable Logic Controller (S7-1516) 589671 (46962-00)



The Programmable Logic Controller (S7-1516) consists of a controller from the Siemens family. This powerful PLC comes with sixteen 24 V dc inputs, eight 4-20 mA inputs, eight 24 V dc output relays and eight 4-20 mA outputs hardwired to both banana jacks and terminal blocks on the module front panel. Banana jacks provide an easy and fast way to wire a setup, while terminal blocks allow students to wire their setup in a way much closer to what is commonly found in the industry.

The Siemens S7-1516 PLC supports two types of network communication: one PROFIBUS and three PROFINET ports.

The S7-1516 PLC is programmed using Siemens SIMANTIC STEP 7 Pro software in TIA Portal environment (Model 46986) using any of four languages: Ladder (LAD), Function Block Diagram (FBD), Instruction List (IL). This module has ten switches that the instructor can use to insert faults.

### Distributed I/O Module (HART) 589674 (46976-00)



The Distributed I/O Module (ET 200M) consists of an interface module from Siemens and permits to connect analog I/O's using HART communication protocol to a Siemens PLC through PROFINET communication. This I/O module features eight 4-20 mA HART analog inputs and eight 4-20 mA HART analog outputs.

All the I/O'S can be hardwired to both banana jacks and terminal blocks on the module front panel. Banana jacks provide an easy and fast way to wire a setup, while terminal blocks allow students to wire their setup in a way much closer to what is

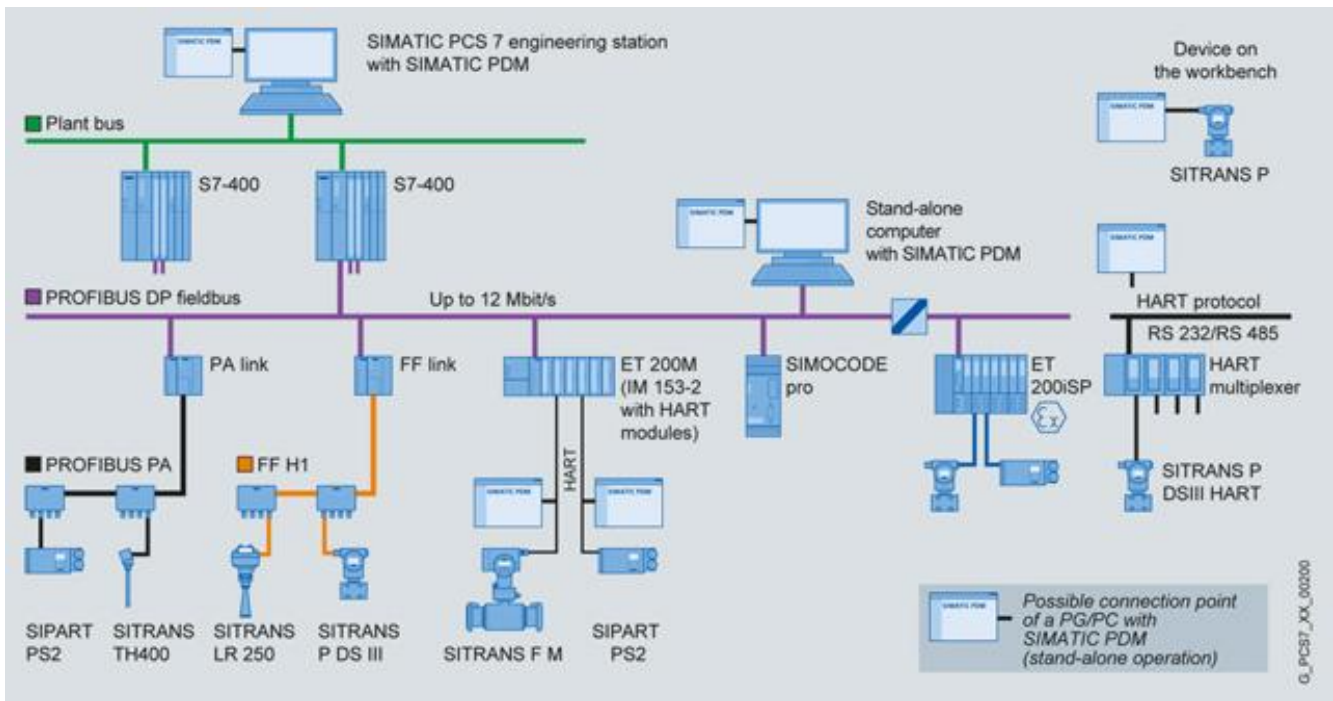
commonly found in the industry.

This module has six switches that the instructor can use to insert faults.

### TIA Portal PLC Software (Step 7 Professional) with Process Device Manager (PDM) 589676 (46986-00)



The TIA Portal PLC Software (Step 7 Professional) is a programming software that is required for programming Siemens programmable logic controllers. Model 46986-0 also includes SIMATIC PDM (Process Device Manager) software for configuration, parameter assignment, commissioning, diagnostics and maintenance of intelligent field devices and automation components.



## Optional Equipment Description

### Touch-Screen Computer – Large (Optional) 589677 (46299-A0)



The Touch-Screen Computer is a solution for saving space in the classroom. It features a large 23-inch touch-screen and a high-speed processor. It can be installed on a full-motion mount, model 3451-A0 or 3451-B0, on the Instrumentation Workstation to maximize desk space.

Reflecting the commitment of Festo Didactic to high quality standards in product, design, development, production, installation, and service, our manufacturing and distribution facility has received the ISO 9001 certification.

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**Festo Didactic SE**

Rechbergstrasse 3  
73770 Denkendorf  
Germany

P. +49(0)711/3467-0  
F. +49(0)711/347-54-88500

**Festo Didactic Inc.**

607 Industrial Way West  
Eatontown, NJ 07724  
United States

P. +1-732-938-2000  
F. +1-732-774-8573

**Festo Didactic Ltée/Ltd**

675 rue du Carbone  
Québec QC G2N 2K7  
Canada

P. +1-418-849-1000  
F. +1-418-849-1666

**[www.labvolt.com](http://www.labvolt.com)**

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