# **MicroLogix PLC Bundle – Educational** 588521 (3539-70)



LabVolt Series

Datasheet



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### **General Description**

This bundle includes a MicroLogix 1400 PLC, one copy of RSLogix 500, a communication cable, and a user guide.

This bundle includes a compact programmable logic controller ideal for small- to mid-sized applications. The PLC features ten digital inputs, two analog inputs, six digital outputs, and two analog outputs. Programs for this PLC are written using Rockwell's RSLogix Micro software and can be used to implement a wide variety of control procedures, including PID routines. The PLC also features an Ethernet communication port, a DF1 Full-Duplex Serial link (RS-232-C) port, an embedded LCD and control keys, and many more advanced features. Eight fault insertion switches are hidden behind the module.

### **List of Equipment**

Qty Description	Model number
1 PLC Software (RSLogix Micro, Educational)	
1 Communication Cable (Allen-Bradley)	
1 Programmable Logic Controller (AB MicroLogix 1400)	
Manual	
Description	Manual number
MicroLogix Programmable Logic Controller (User Guide)	
Additional Equipment Required to Perform the Exercises (Purch	ased separately)
Qty Description	Model number
1 Touch-Screen Computer – Large	
Additional Equipment Required to Perform the Exercises (Purch	ased separately)
Qty Description	Model number
1 Touch-Screen Computer – Large	
Additional Equipment Required to Perform the Exercises (Purch	ased separately)
Qty Description	Model number
1 Touch-Screen Computer – Large	
Additional Equipment Required to Perform the Exercises (Purch	ased separately)
Qty Description	Model
1 Touch-Screen Computer – Large	<b>number</b> 589677 (46299-A0)
Additional Equipment Required to Perform the Exercises (Purch	ased separately)
Qty Description	Model
1 Touch-Screen Computer – Large	<b>number</b> 589677 (46299-A0)

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Qty Description	Model number
1 Touch-Screen Computer – Large 589677 (40	
Additional Equipment Required to Perform the Exercises (Purchased separately)	
Qty Description	Model number
1 Touch-Screen Computer – Large 589677 (4	
Additional Equipment Required to Perform the Exercises (Purchased separately)	
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Additional Equipment Required to Perform the Exercises (Purchased separately)	
Additional Equipment Required to Perform the Exercises (Purchased separately)  Qty Description	Model number

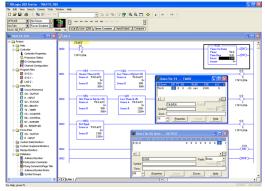
Additional Equipment Required to Perform the Exercises (Pur	chased separately)
Qty Description	Model number
1 Touch-Screen Computer – Large	
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Qty Description	Model
1 Touch-Screen Computer – Large	<b>number</b> 589677 (46299-A0)
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1 Touch-Screen Computer – Large	<b>number</b> 589677 (46299-A0)
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Qty Description	Model number
1 Touch-Screen Computer – Large	
Additional Equipment Required to Perform the Exercises (Pur	
Qty Description	Model number
1 Touch-Screen Computer – Large	

### **System Specifications**

Parameter	Value
Power Requirement	
Current	1.5 A
Inputs	
Analog (2)	4-20 mA analog inputs
Digital (10)	24 V dc contact inputs
Outputs	
Analog (2)	4-20 mA analog outputs
Digital (6)	24 V dc relays (2 relays - 1.1 A, 2 high-speed FET relays - 0.1 A, 2 FET relays - 1.5 A)
Number of PID loops	2
Number of fault switches	8
Communication	RS232/RS485 protocols and Ethernet
Configuration	From a computer using RSLogix 500

### **Equipment Description**

# PLC Software (RSLogix Micro, Educational) 587552 (3245-A0)



The RSLogix Micro software is a tool to design and implement ladder programs for the Allen-Bradley MicroLogix<sup>™</sup> family of processors (it cannot be used with SLC 500 controllers). It is a Windows<sup>®</sup>-based application produced by Rockwell Software that allows PLC programming using a personal computer.

The free-form ladder of RSLogix Micro lets students concentrate on the application logic rather than using the proper syntax when editing programs. Several other features of RSLogix Micro greatly facilitate PLC programming, such as a project verifier, drag-and-drop editing, and search-and-replace functions. The PLC can be programmed via either an RS-232 port or an Ethernet

port on the PLC processor. This software comes with RSLinx™, which provides connectivity between the PLC and the computer.

The software is available with either an educational license (Model 3245-A) or as a commercial license (Model 3245-B).

### **Specifications**

Parameter	Value
Computer Requirements	A currently available personal computer with USB 2.0 ports, running under one of the following operating systems: Windows <sup>®</sup> 7 or Windows <sup>®</sup> 8.

# Communication Cable (Allen-Bradley) 587566 (3246-40)



The communication cable is an RS-232-C serial cable specifically designed to connect a personal computer to an Allen-Bradley programmable logic controller, thus making it possible to program and monitor the PLC.

### **Specifications**

Parameter	Value
Communication Cable	
Туре	8 pin mini DIN to 9 pin D shell
Length	2 m (6.5 ft)

# Programmable Logic Controller (AB MicroLogix 1400) 8203776 (46964-10)



This PLC features ten digital inputs, two analog inputs, six digital outputs, and two analog outputs. Programs for this PLC are written using Rockwell's RSLogix Micro software (Model 3245-A or -B) and can be used to implement a wide variety of control procedures, including PID routines. It includes an Ethernet communication port, a DF1 Full-Duplex Serial link (RS-232-C) port, an embedded LCD and control keys, and many more advanced features. Hidden behind the module is a total of eight switches that the instructor can use to insert faults in the system.

## **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.

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