

# SCADA for LVDAC-EMS 8094377 (8973-00)

# FESTO

LabVolt Series

Datasheet



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## General Description

Education in electrical engineering at Festo Didactic is largely based on our unique electric power technology training platform, which combines hardware, software, and courseware to allow study of electrical energy.

At the heart of the systems are the data acquisition and control interface (DACI) and the four-quadrant dynamometer/power supply. When used in combination with LVDAC-EMS software program, students have access to a complete set of computer-based instruments to measure, observe, analyze, and control electrical and mechanical parameters of a workstation on their computers.

Our state-of-the-art training platform has just been enhanced through the integration of a new SCADA-EMS feature, a software program designed to run in combination with LVDAC-EMS. SCADA-EMS transforms LVDAC-EMS and the workstation's computer into a local workstation that can be monitored and controlled over a local network from a supervisory computer. Using the OPC Server protocol, SCADA-EMS enables users to design their own interface by calling the different applications running on the local workstations.

SCADA-EMS enhances LVDAC-EMS by adding several new features. You will be able to:

- Collect data from local workstations.
- Observe and control one or more stations from one or more supervisory stations.
- Remotely control several applications in your lab.
- Use a workstation in a different room to make real demonstrations over the network in your classroom without having to bring your workstation to class.
- Introduce students to the fundamentals of SCADA in a smart grid context.
- Recreate a complete grid with several different applications running.

The SCADA-EMS software program can be downloaded from our website. This locked version can be unlocked by a USB dongle. A dongle unlocks five workstations; order as many dongles as required.

Before ordering the dongles, please install:

- LVDAC-EMS (version 3.19 or later) on all your workstation computers.
- SCADA-EMS (1.01 or later) on the workstation computers you want to use to build up your SCADA application.

Contact your sales representative about order details and options.

## LVDAC-EMS

The LVDAC-EMS software is a freeware which can be downloaded anytime from the Festo Didactic website ([www.labvolt.com](http://www.labvolt.com)). The LVDAC-EMS software is a user-friendly tool that facilitates the use of the various functions which can be implemented with USB peripherals such as the Data Acquisition and Control Interface (DACI), LabVolt Series 9063, and the Four-Quadrant Dynamometer / Power Supply, LabVolt Series 8960.

The LVDAC-EMS software also includes a firmware update for the DACI. When a DACI is connected to a newer version of LVDAC-EMS, the user can easily update the module using a simple update wizard.

## LVDAC-EMS Functions

The functions that are currently available for the DACI, Model 9063, are described below. All functions can be activated in any DACI by purchasing a license for that specific function and then performing the upgrade procedure on the DACI. New functions will be added to this datasheet as they become available.

## Instrumentation Functions

The instrumentation functions of LVDAC-EMS replace a multitude of actual data acquisition devices (e.g., voltmeters, ammeters, oscilloscopes, synchrosopes) with a series of computer-based instruments that display the data measured by the DACI.

## Features & Benefits

- Monitor and control several workstations from one (or more) supervisory computer(s)
- Use OPC server protocol to communicate between the different workstations
- Include your own pictures and schematics
- Introduce SCADA in existing EMS laboratories

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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