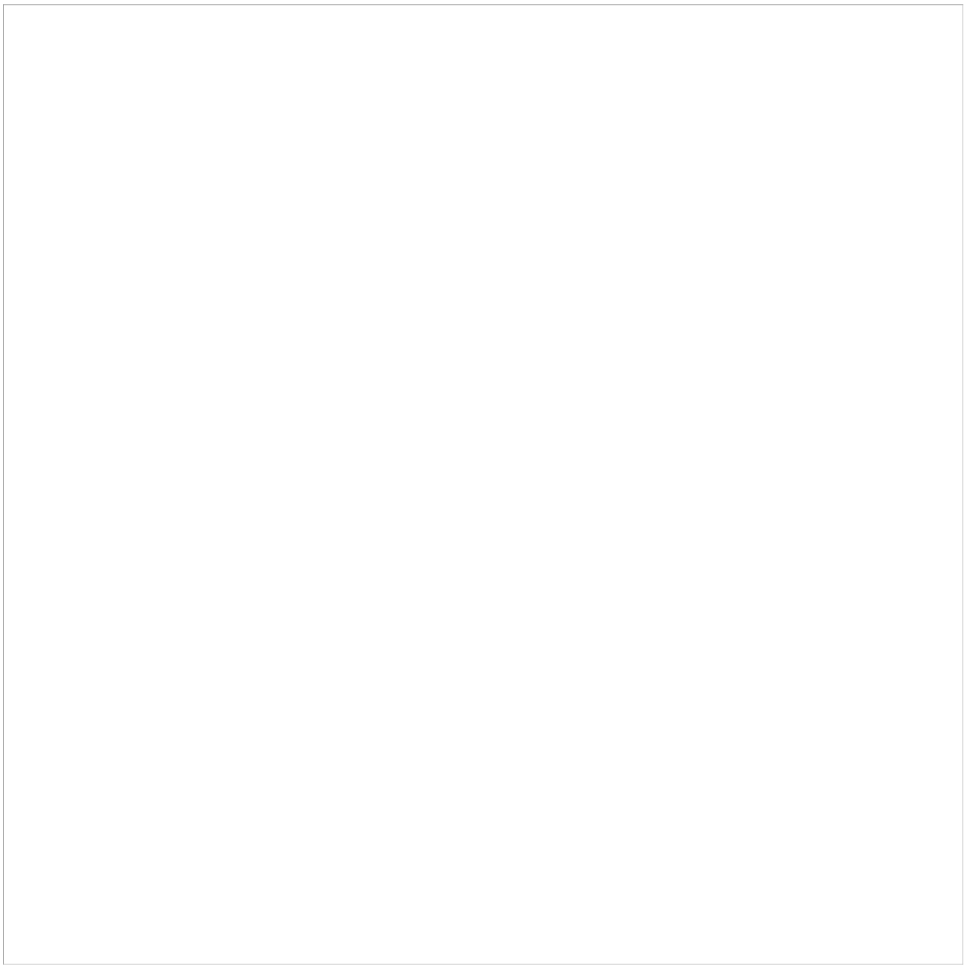
Ni-MH Batteries
586799 (8801-A0)

LabVolt Series

Datasheet



* The product images shown in this document are for illustration purposes; actual products may vary. Please refer to the Specifications section of each product/item for all details. Festo Didactic reserves the right to change product images and specifications at any time without notice.

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Table of Contents

General Description 3
Specifications 3

General Description

In the context of the Renewable Energy Training Program, batteries are used for energy storage in applications. They will be used as storage devices destined for green energy production using solar power or wind power. Batteries are also used for their portability in hybrid and electric vehicles. The specific characteristics of batteries (charge, discharge, energy density, etc.) are covered extensively through a variety of lab exercises in the Renewable Energy Training Program.

The Ni-MH Batteries, Model 8801-A, consists of two 12 V packs of nickel-metal hydride (Ni-MH) batteries enclosed in a half-size EMS module. These batteries are used in some exercises of Lab-Volt's Electric Power Technology Training Systems, Series 8010, in order to study Ni-MH battery characteristics as well as electrical energy storage in various applications. Ni-MH batteries have higher specific energy and energy density than lead-acid batteries. Each pack is equipped with a thermistor which can be used by the Four-Quadrant Dynamometer/Power Supply, Model 8960-2, to monitor the battery temperature during charge as it is a critical parameter for that type of battery.

Normal connection to the batteries is through 4 mm safety banana jacks mounted on the front panel of the module. Miniature (2 mm) banana jacks also mounted on the front panel provide access to the thermistors.

Specifications

Parameter	Value
Batteries (2)	
Type	Nickel-metal hydride
Voltage	12 V (10 cells of 1.2 V in each pack)
Capacity	2 Ah
Maximum Charge Current	1 A
Maximum Discharge Current	4 A
Thermistors	
Type	NTC
Resistance Value at 25°C	10 kΩ
Response Time	2 ms
Voltage Divider	Center-tap between the thermistor and a 10kΩ resistor
Auto-Reset Protective Fuse	
Battery	4 A (hold current), 8 A (trip current)
Physical Characteristics	
Dimensions (H x W x D)	154 x 287 x 440 mm (6.1 x 11.3 x 17.3 in)
Net Weight	TBE

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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