

# Networked Data Acquisition Interface (NDAI) 579813 (46540-00)

**FESTO**

LabVolt Series

Datasheet



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Festo Didactic  
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## General Description

The Networked Data Acquisition Interface (NDAI) is a remote monitoring interface. Ten analog inputs on the module faceplate allow monitoring of different parameters of the Solar/Wind Energy Training System. These analog inputs include:

- Six channels for monitoring dc power levels
- Two channels for monitoring ac power levels
- Two channels for monitoring environmental conditions

In addition to the 10 possible parameters monitored using the analog inputs on the module faceplate, more than 22 additional parameters can be calculated and displayed on screen. These measured and calculated parameters include:

### Measured parameters

- AC load voltage
- AC load current
- DC load current
- Wind turbine current
- Solar module voltage
- Solar module current
- Battery bank / Wind turbine / DC load voltage
- Battery bank current (negative = charging)
- Solar irradiance
- Wind speed

### Calculated parameters

- Solar module power
- Wind turbine power
- Battery bank power
- DC load power
- Inverter input / Diverter output voltage
- Inverter input / Diverter output current
- Inverter input / Diverter output power
- Inverter output / AC load power
- Power inverter efficiency
- Total power generated
- Total power consumed
- Total energy generated
- Total energy consumed
- Total energy generated (long term)

- Total energy consumed (long term)
- Energy cost savings
- CO<sup>2</sup> emissions avoided
- Energy cost savings (long term)
- CO<sup>2</sup> emissions avoided (long term)
- CO<sup>2</sup> emissions offset (for driving)
- CO<sup>2</sup> emissions sequestered (by planting)
- Server access time

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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