

# DaqPRO

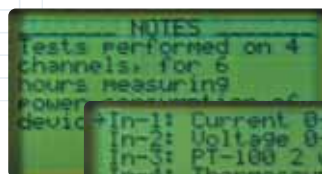
All in one solution for data logging and analysis



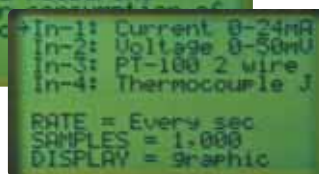
The *DaqPRO* is a portable, battery operated data acquisition and logging system offering 16-bits, high-resolution, 8 channel data logging. The *DaqPRO* features powerful graphical display and analysis functions for measuring voltage, current and temperature. It is designed to provide a professional, compact, stand-alone low cost data logging system for a wide variety of applications.

- High-end data acquisition hand-held mobile solution
- 8 channels each capable of measuring seven popular parameters
- Setup on every port makes it viable for all industries
- Stand-alone operation: Display and keyboard for field programming and analysis (graph/table)
- Rechargeable 7.2 V battery with over 500 charging cycles
- High sampling rate – up to 4,000 samples/second
- Large data storage 512 KB RAM
- Fast communication channels: USB
- Multiple logging storage of up to 100 sampling sessions
- Scales readings into meaningful engineering units e.g. bar, ppm
- Built-in clock and calendar keeps track of time and date for each data recording
- On screen text editing to annotate collected data
- Value for money – less than \$130 per channel

*DaqPRO* provides truly independent data acquisition with full setup, data display and analysis all on the *DaqPRO* screen.



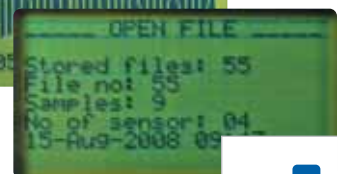
Notes



Setup



Numeric & graphic displays



File storage



## DaqLab Software

The *DaqPRO* is then the perfect choice for remote data logging and ideal for use as a mobile measuring device in any industrial environment or for field off site monitoring.

### Analysis Wizard

Scientific Functions  
Statistics



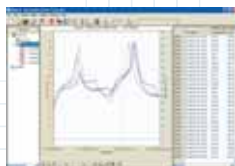
### Sensor calibration



### Online logger setup



### Online graph & table view



### Export to Excel

## About Fourier Systems

Fourier Systems Ltd. is a worldwide leader of compact portable data logging devices and accessories for the industrial market. Fourier's robust line of advanced products is designed to automate and simplify daily data logging tasks. Beyond delivering quality products, Fourier is dedicated to providing sophisticated solutions that integrate the most advanced technologies. When it comes to professional data logging, leading companies around the world count on Fourier to provide them with the most up to date equipment.

## Specifications

### Inputs (DaqPRO 5300)

Selectable type for each input: 0 to 24 mA, 0 to 50 mV, 0 to 10 V, NTC, PT-100, Thermocouple, Pulse and frequency (Input 1 only)

#### 0 to 24 mA

Range: 0 to 24 mA  
Resolution: 4.76  $\mu$ A  
Accuracy:  $\pm 0.5\%$   
Loop impedance: 21  $\Omega$

#### 0 to 50 mV

Range: 0 to 50 mV  
Resolution: 3  $\mu$ V  
Accuracy:  $\pm 0.5\%$

#### 0 to 10 V

Range: 0 to 10 V  
Resolution: 200  $\mu$ V  
Accuracy:  $\pm 0.5\%$   
Input impedance: 125 K $\Omega$

#### Temperature NTC

NTC: 10/100 K $\Omega$  resistor  
Range: -25 to 150  $^{\circ}$ C  
Resolution: 0.05  $^{\circ}$ C  
Accuracy:  $\pm 0.5\%$

#### Temperature PT-100

Range: -200 to 400  $^{\circ}$ C  
Resolution: 0.1  $^{\circ}$ C (7 m $\Omega$ )  
Accuracy: -200 to -50  $\pm 0.5\%$   
50 to 400  $\pm 0.5\%$   
-50 to 50  $\pm 0.5\%$

The DaqPRO offers up to 8 PT-100 2 wire channels or 4 PT-100 3 wire channels

#### Temperature Thermocouple J

Range: -200 to 1200  $^{\circ}$ C  
Resolution: 0.1  $^{\circ}$ C (1  $\mu$ V)  
Accuracy: -200 to -50  $\pm 0.5\%$   
50 to 1,200  $\pm 0.5\%$   
-50 to 50  $\pm 0.5\%$   
Cold junction compensation error:  $\pm 0.3\%$

#### Temperature Thermocouple K

Range: -250 to 1,200  $^{\circ}$ C  
Resolution: 0.1 $^{\circ}$ C (1 $\mu$ V)  
Accuracy: -250 to -50  $\pm 0.5\%$   
50 to 1,200  $\pm 0.5\%$   
-50 to 50  $\pm 0.5\%$   
Cold junction compensation error:  $\pm 0.3\%$

#### Temperature Thermocouple T

Range: -200 to 400  $^{\circ}$ C  
Resolution: 0.1  $^{\circ}$ C (1  $\mu$ V)  
Accuracy: -200 to -50  $\pm 0.5\%$   
50 to 400  $\pm 0.5\%$   
-50 to 50  $\pm 0.5\%$   
Cold junction compensation error:  $\pm 0.3\%$

#### Internal Temperature

Range: -25 to 70  $^{\circ}$ C  
Resolution: 0.1 $^{\circ}$ C (1  $\mu$ V)  
Accuracy:  $\pm 0.3\%$

#### Pulse Counter (Input 1 only)

Optocoupler input  
Range: 0 to 65,000  
Input signal: 0 to 5 V  
Input impedance: 470  $\Omega$   
Bandwidth: 0 to 25 Hz

#### Frequency Meter (Input 1 only)

Optocoupler input  
Range: 20 to 4,000 Hz

Input signal: 0 to 5 V  
Input impedance: 470  $\Omega$

#### General A to D Specifications

Noise: 30  $\mu$ V rms  
Internal linearity error:  $\pm 0.08\%$  of FSR  
Offset error: 0.1 %

#### Open Collector Output (Output 8)

Maximum current sink: 50 mA (fuse protected)  
Maximum input voltage: 5 V  
Input impedance: 50  $\Omega$

#### Communication

USB 1.1 compliant

#### Sampling

Capacity: 512 KB  
Analog sampling rate: Variable, 1 sample/hour to 4,000 samples/sec, 1 channel  
Analog sampling resolution: 16-bit  
Channel separation: 80 dB

#### Man Machine Interface

- Full keyboard operation - enables manual programming of the logger
- Graphic LCD 64 x 128 pixels

#### Power Supply

- Internal rechargeable 7.2V NiMH battery
- Built-in battery charger
- External 9 to 12 V DC input
- Battery life: 25 hours between charges

#### Operating Temperature Range

0 to 50  $^{\circ}$ C

#### Casing

Plastic ABS box  
Dimensions: 182 x 100 x 28 mm  
Weight: 450 gr

#### Standards Compliance

CE, FCC

### DaqLAB Analysis Software

- Windows based software: 2000 SP3/2003/XP SP2/Vista Internet Explorer 5.01 or higher
- Fast data download from the DaqPRO
- Data displayed in numeric or graphical display forms
- Graphical analysis tools such as Zoom and Cursors
- Storage of selected data on disk files
- Hard copy printing of the collected data
- Direct data export to EXCEL
- On-line retrieval and display of data in real-time
- Incorporating data processing functions
- Setting up the DaqPRO
- Calibrating the DaqPRO
- Defining new sensors

### Accessories

- Carrying case
- Solar cell and battery for field data logging
- Weather box complying with the IP-67 standard for protecting the DaqPRO while working in field applications

### Ordering Information

P/N	Description
DB5301	DaqPRO data logger, user manual, carrying case, AC/DC adapter, DaqLab Windows analysis software, communication cable
11460A	Weather box

To order DaqPRO products and accessories:  
[www.fouriersystems.com](http://www.fouriersystems.com)

