OM-DAQXL is an 8 or 16 channel analog input portable data logger with a 7 inch resistive touch color display. All inputs are programmable and can be configured for millivolts, volts, milliamps, thermocouple, RTD, thermistor, strain gauge, or frequency. All the menus, selections, and configurations can be done from the display touch screen. The unit also has 4 digital inputs, 4 digital outputs, 4 alarm outputs, one USB host port and one USB device port. The unit also has 3 LEDs for different indications (Power, Alarm and Logging).

The OM-DAQXL comes complete with protective rubber boot, rechargeable lithium ion battery, 32 GB SD card, one plastic stylus, 1 GB USB thumb drive, 1.8 m (6') USB cable, 1.8 m (6') digital I/O cable, alarm/excitation terminal block, universal AC adaptor, screwdriver, quick start guide, set of 5 PTFE insulated Type K thermocouples, set of 5 ferrites to install on the thermocouple inputs (for noise reduction) and crimp-on ground lug. The unit can be wall mounted using the provided keyhole mount or operated on a bench using the tilt stand.
Home Screen
The home screen is the main screen of the data logger’s user interface. It is divided into 3 distinct sections as shown below.

**Status/Information Display:** This status bar provides information such as Battery Charge percentage, System Clock (displays current Time & Date), Lock/Unlock data logger, status of the 4 Alarm Outputs, and Logging Mode indication.

**Data Display Area:** This is the area where different inputs (up to 4 Channels) are displayed vs. time. The data is displayed in 4 different ways: Waveform, Waveform & Table, Table only, and Digital. In the Digital view, each channel name and number are displayed along with the value.

**Navigation Toolbar:** This toolbar provides access to all the functions and menus of the data logger. You can extend or retract the toolbar by pressing the Tool button. The following flow chart shows all the functionalities of the buttons of the toolbar.

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**Digital Display View**

**Status/Information Display:** This status bar provides information such as Battery Charge percentage, System Clock (displays current Time & Date), Lock/Unlock data logger, status of the 4 Alarm Outputs, and Logging Mode indication.

**Data Display Area:** This is the area where different inputs (up to 4 Channels) are displayed vs. time. The data is displayed in 4 different ways: Waveform, Waveform & Table, Table only, and Digital. In the Digital view, each channel name and number are displayed along with the value.

**Navigation Toolbar:** This toolbar provides access to all the functions and menus of the data logger. You can extend or retract the toolbar by pressing the Tool button. The following flow chart shows all the functionalities of the buttons of the toolbar.

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The OM-DAQXL comes complete with hard carrying case, protective rubber boot, rechargeable lithium ion battery, 32 GB SD card, one plastic stylus, 1 GB USB thumb drive, 1.8 m (6') USB cable, 1.8 m (6') digital I/O cable, alarm/excitation terminal block, universal AC adaptor, screwdriver, quick start guide, set of 5 PTFE insulated Type K thermocouples, set of 5 ferrites to install on the thermocouple inputs, set of 5 ferrites to install on the thermocouple inputs (for noise reduction) and crimp-on ground lug. Not all items shown. See User Guide for instructions on installing ferrites on the thermocouple inputs.
**Standard Operation**

The OM-DAQXL’s touch screen user interface (UI) makes configuring the data logger for operation straightforward and simple. Recorded data files can easily be reviewed and analyzed on the OM-DAQXL. For data analysis on a computer, simply transfer the data file from the SD card or USB thumb drive to the PC and open the selected data file into Excel® or other data analysis software.

**Toolbar Flowchart**

- **Log Data**
  - Depending on current state, starts logging or arms data logger.

- **Annotate**
  - Pauses display and allows annotation on the display using the stylus.

- **Screenshot**
  - Immediately takes a screenshot.

- **Views**
  - Select data view or Toggle slide show

- **Display Channel**
  - Select channel group or Assign channels to groups

- **Add Channel**
  - Shows a tabular list of all currently configured channels

- **Channel List**
  - Allows access to all stored data files for reviewing or copying.

- **Stored Files**
  - Select the type of settings you wish to change.

- **Settings**
  - Provides access to context appropriate help screens

- **Help**
  - Allows assignment of channels to 4 groups.

- **Channel Groups**
  - Configure a new channels input type setting.

- **Data Ranges**
  - Configure a new channels data range settings.

- **Input Type**

- **Trigger Settings**

- **Alarm Settings**

- **Data Session Settings**

- **Device Settings**

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OM-DAQXL shown smaller than actual size.
Specifications

- **Screen**: 7 inch, TFT, resistive touch comes with plastic stylus
- **Rubber Boot**: Black
- **Analog Input Type**: Thermocouple, thermistor, RTD, strain gauge, DC voltage, DC current
- **Digital Input Type**: Pulse/Frequency
- **Thermocouple Types**: J, K, T, E, R, S, B, C, N
- **Thermistor Type**: 2252Ω/10 KΩ
  - **Range**: 2252Ω -30 to 150°C (-22 to 302°F)
  - **Range**: 10 KΩ -5 to 150°C (23 to 302°F)
  - **Resolution**: 0.1°C
  - **Accuracy**: ±1°C
- **RTD Types**: 2-, 3- or 4-Wire RTD
  - **Sensor Standard**: Pt 100, Pt 500, Pt 1000 (0.00385 curve)
  - **Sensor Standard**: Pt 100, Pt 500, Pt 1000 (0.00392 curve)
  - **Range**: 0.00385 curve -200 to 850°C (-328 to 1562°F)
  - **Range**: 0.00392 curve -200 to 660°C (-328 to 1220°F)
- **Temperature Measurement Accuracy**:
  - **J**: ±(0.15% of reading + 1.1°C)
  - **K**: ±(0.15% of reading + 1.7°C)
  - **T**: ±(0.15% of reading + 2.0°C)
- **DC Voltage Input**
  - **Voltage Range**: 50 mV -50 to 50 mV
    - **Accuracy**: ±0.1% of FS
  - **Voltage Range**: 100 mV -100 to 100 mV
    - **Accuracy**: ±0.1% of FS
  - **Voltage Range**: 1 V -1.00 to 1.00V
    - **Accuracy**: ±0.1% of FS
  - **Voltage Range**: 5V -5.00 to 5.00V
    - **Accuracy**: ±0.1% of FS
  - **Voltage Range**: 10V -10.00 to 10.00V
    - **Accuracy**: ±0.1% of FS
  - **Voltage Range**: 20V -20.00 to 20.00V
    - **Accuracy**: ±0.1% of FS
  - **Voltage Range**: 50V -50.00 to 50.00V
    - **Accuracy**: ±0.1% of FS

- **DC Current Input**
  - **Current Range**: 20 mA -20 to 20 mA
    - **Accuracy**: ±0.1% of FS

- **Alarm Output**: 4, Open collector, 30V @ 500 mA
- **Alarms per Channel**: Two
- **Alarm Types**: High, low, windows in, windows out, open sensor
- **Alarm Latching**: Settable in alarm menu
- **On Alarm Event**: Map to 4 alarm outputs, take screen shot, sound buzzer
- **Logging Conditions**: On command or based on trigger conditions
- **Start and Stop Trigger Conditions**: Timer, date and time, weekday and time, alarm output, external trigger
- **Memory**:
  - **Internal**: 1 GB
  - **SD Card**: 32 GB
  - **USB Drive**: 32 GB
- **USB Ports**: One host and one device
- **Battery**: Rechargeable lithium-ion; 7.2V @ 4.8 Ah
- **Battery Life**: 4 to 8 hours based on display setting
- **DC Adaptor**: 12 Vdc @ 5A
- **Operating Environment**: 0 to 50°C (32 to 122°F), 0 to 95% RH non-condensing
- **General Dimensions**: 28.6 L x 15.24 H x 6.35 cm D (9 x 6 x 2.5”)
- **Weight**: 1.13 kg (2.5 lbs)

*Note: Measurement accuracy is at room temperature after 30 minutes of warm-up.*
To Order

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
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<tbody>
<tr>
<td>OM-DAQXL-1-*</td>
<td>8-channel touch screen data logger with USB host/device</td>
</tr>
<tr>
<td>OM-DAQXL-2-*</td>
<td>16-channel touch screen data logger with USB host/device</td>
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Accessories

<table>
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<tr>
<th>Model No.</th>
<th>Description</th>
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<tr>
<td>OM-DAQXL-RB</td>
<td>Spare rubber boot</td>
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<tr>
<td>SD32GB</td>
<td>Spare 32 GB SD card</td>
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<tr>
<td>OM-DAQXL-USB</td>
<td>Spare USB cable, 1.8 m (6')</td>
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<tr>
<td>OM-DAQXL-CABLE6</td>
<td>Spare digital I/O cable, 1.8 m (6')</td>
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<tr>
<td>OM-DAQXL-TB8</td>
<td>Spare alarm/excitation terminal block</td>
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<tr>
<td>5TC-TT-K-20-36</td>
<td>Spare set of 5 Type K thermocouples with stripped leads</td>
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<tr>
<td>PT-USB-1</td>
<td>Spare 1 GB thumb drive</td>
</tr>
<tr>
<td>OM-DAQXL-RF</td>
<td>Spare ferrite for thermocouple input</td>
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<tr>
<td>OM-DAQXL-ADAPTOR-*</td>
<td>Spare 12 Vdc, 5A power adaptor</td>
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<tr>
<td>OM-DAQXL-BATTERY</td>
<td>Spare rechargeable battery pack</td>
</tr>
<tr>
<td>OM-DAQXL-STYLUS</td>
<td>Spare stylus</td>
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**Accessories**

OMEGA CARE extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE covers parts, labor and equivalent loaners.

<table>
<thead>
<tr>
<th>Country Code</th>
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