The OMB-NET6000 Series with Encore software combines accurate, Ethernet-based DAQ modules with powerful, easy-to-use software. OMB-NET6000 Series devices feature integrated signal conditioning and a modular design with built-in channel expansion capability (by adding additional OMB-NET6000 Series modules).

Because the OMB-NET6000 Series uses an Ethernet connection, devices can be connected directly to a PC or used in remote configurations utilizing multiple devices. Devices are offered for voltage, thermocouple, or direct strain inputs.

Each device includes 12 analog input channels. The OMB-NET6220 offers 12 voltage inputs, BNC connectors, 16-bit resolution, and a 100 kHz per channel sample rate. The OMB-NET6222 is a 12-channel, 24-bit thermocouple input device. The OMB-NET6224 offers direct strain gage inputs, 24-bit resolution, and a 50 kHz per channel sample rate.

The OMB-NET6230 and OMB-NET6231 are high-speed, isolated voltage input devices. Each device also includes 8 digital I/O channels. Included with each OMB-NET6000 Series device is new Encore interactive measurement software. Encore combines an intuitive user interface with robust functionality. It allows users to quickly configure hardware, develop and customize data displays, analyze data with built-in analysis tools, and provides the ability to develop comprehensive test reports.

Utilizing the connectivity of an Ethernet based system, multiple OMB-NET6000 series devices can be combined to build expandable, mixed signal systems. These systems can be used in a central location, or in distributed or remote configurations.

**ANALOG INPUTS**

**OMB-NET6220**

The OMB-NET6220 is equipped with 12 analog input channels with a ±10V range. Each analog input provides 16-bit resolution with a maximum 100 kHz per channel sample rate. All channels are sampled simultaneously.

**Table: OMB-NET6000 Series Device Overview**

<table>
<thead>
<tr>
<th>Feature</th>
<th>OMB-NET6220</th>
<th>OMB-NET6222</th>
<th>OMB-NET6224</th>
<th>OMB-NET6230</th>
<th>OMB-NET6231</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analog Input type</td>
<td>Voltage</td>
<td>Thermocouple</td>
<td>Strain gage/bridge</td>
<td>Voltage</td>
<td>Voltage</td>
</tr>
<tr>
<td>Analog Inputs</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Digital I/O</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Resolution</td>
<td>16-bit</td>
<td>24-bit</td>
<td>24-bit</td>
<td>24-bit</td>
<td>24-bit</td>
</tr>
<tr>
<td>Sample Rates</td>
<td>100 kHz</td>
<td>2 Hz</td>
<td>50 kHz</td>
<td>50 kHz</td>
<td>50 kHz</td>
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<tr>
<td>Voltage Input Range</td>
<td>±10V</td>
<td>±80 mV</td>
<td>±25 mV/V</td>
<td>±10 V</td>
<td>±60 V</td>
</tr>
<tr>
<td>Connector Type</td>
<td>BNC</td>
<td>Screw-terminal</td>
<td>RJ50</td>
<td>Screw-terminal</td>
<td>Screw-terminal</td>
</tr>
<tr>
<td>Ch-to-ch Isolation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
OEMB-NET6222

The OMB-NET6222 is equipped with 12 thermocouple input channels. Inputs are also equipped with a ±80 mV range. Each analog input provides 24-bit resolution with a 2 S/s sample rate per channel. All inputs are sampled simultaneously.

OEMB-NET6224

DIRECT STRAIN GAGE INPUTS

The OMB-NET6224 is equipped with 12 analog input channels capable of measuring full-, half-, or quarter-bridge sensors. Each of the 12 analog channels has its own 24-bit ADC and input amplifier allowing all 12 channels to be sampled simultaneously.

The OMB-NET6224 also includes anti-aliasing filters. All strain input signals are attached via 12 RJ50 connectors mounted on the front of the module.

The OMB-NET6224 features direct strain gage inputs. Half or full-bridge sensors are supported. Quarter-bridge sensors are also supported using an external resistor. The OMB-NET6224 is also 100% software programmable. Excitation, auto-zero, and shunt calibration are each adjusted in software without relying on manually adjusted trim pots which can cause increased error and drift. Excitation is provided by the OMB-NET6224 and can be software selected for 2.5V, 3.3V, 5V, or 10V. For excitation values beyond those listed, an external excitation source may be used. Connectors are provided on the front of the unit for excitation source wiring.

SHUNT CALIBRATION

Shunt calibration enables each channel to be put into a known imbalance condition to set or verify channel calibration. Shuntcal allows a full scale gain to be set without physically loading the bridge to capacity.

REMOTE SENSING

Remote sensing automatically and continuously corrects for voltage drop errors in excitation leads.

SIGNAL CONNECTIONS

The 12 strain gage inputs on the OMB-NET6224 are accessed via 12 RJ50 front panel connectors. 12 user specified connector modules are included with the OMB-NET6224.

FULL- AND HALF-BRIDGE CONFIGURATIONS

The OMB-NET6224 supports full- and half-bridge configurations directly. Users can connect to the RJ50 front panel connectors or use the OMB-NET-CN-268 12-pin screw terminal break-out connector module.

QUARTER-BRIDGE CONFIGURATIONS

For quarter-bridge configurations the OMB-NET-CN-269 and OMB-NET-CN-270 feature 120 Ω and 350 Ω internal bridge completion resistors respectively. The OMB-NET-CN-269 and OMB-NET-CN-270 feature an RJ50 female connector one end and screw terminals on the other. One module is required for each channel.

OEMB-NET6230 and OMB-NET6231

The OMB-NET6230 is equipped with 12 analog input channels with a ±10 V range. The OMB-NET6231 includes a ±60 V range. Each analog input features a 24-bit ADC with a maximum 50 kHz sample rate per channel. All channels are sampled simultaneously. The OMB-NET6230 and OMB-NET6231 also include 250 Vrms channel-to-channel isolation for increased signal integrity and protection.

DIGITAL I/O

OMB-NET6000 Series modules include eight digital I/O lines. All eight lines are accessible via a 9-pin female DSUB connector located on the rear panel of the unit. Each digital I/O bit can be programmed individually to be either an input or an output.

COUNTERS

There are four 32-bit counters built into each OMB-NET6000 Series module. They are accessed through the 9-pin female DSUB connector located on the rear of the unit. Each counter has a maximum 20 MHz input frequency and can be used in counter or encoder (A, B, and Z) modes.

TRIGGERING

A variety of trigger modes are supported by the OMB-NET6000 Series. A wide selection of programmable analog and digital trigger modes are available for starting an acquisition. All trigger modes, along with the number of scans and the sample rate for pre- and post-trigger data, are software programmable prior to the start of a scan sequence.
ENCORE SOFTWARE FEATURES
(Refer to Screen Capture Above)

1. Signal Explorer displays the data sources, computations, snapshots and logs available for your project. It also allows you to select and drag signals into the Data View. Signals can also be dragged directly into Excel.

2. Log Window displays a list of a projects logged data (including snapshots) sorted by the time at which you recorded the log or took the snapshot.

3. Snapshots allow you to save a record of the current values of any signal in your project. You can use snapshots as a reference signal to compare data within the same or another project.

4. Data View tab allows you to view your data by dragging signals directly from the Signal Explorer or the Log Window. The Data View tab can display signals in several formats, including graphs, charts, and various numeric representations. When you drag a signal to the Data View tab, the signal appears in a new or existing display depending on whether a display showing that type of data already exists.

5. Legend (Graph Legend) lists every signal displayed in the graph and also shows its corresponding plot color.

6. Channel View is a table-style section which gives you an overview of all your channels and their settings. You can enable (or disable) channels, select the measurement type, enable (or disable) logging, perform mx+b calculation, and more. You can also use the Channel View toolbar to quickly jump to Acquisition Configuration or (system) Calibration windows.
SYSTEM POWER CONNECTION
The OMB-NET6000 Series modules offer the flexibility to be powered either directly from a 19 V to 30 Vdc source, or via the included OMB-NET-TR-60U AC power adaptor.

ETHERNET FEATURES
The OMB-NET6000 Series transfers acquired data to the PC via 10/100BaseT Ethernet, allowing a continuous stream of data to be collected and stored in a PC’s memory or hard drive. The most common and highest performance connection is with dedicated, point-to-point Ethernet link between the PC and the OMB-NET6000 Series module. With an enterprise-wide Ethernet network connection, any number of OMB-NET6000 Series modules can be connected to the network.

MULTI-UNIT SYNCHRONIZATION
Multiple OMB-NET6000 Series modules can be synchronized via the rear-panel SYNC ports on each unit. After connecting each module to an Ethernet port, simply connect multiple OMB-NET6000 Series modules together using SYNC cables (OMB-CA-74-1). Encore software provides the capability of setting one of the OMB-NET6000 Series modules as the master and the others as slaves. The sampled data phase relationship among channels between multiple devices is dependent on the “Channel SYNC Skew” specification for each device.

ENCORE SOFTWARE Overview
Encore is a premier data acquisition software package and is included with each OMB-NET6000 Series module. Encore combines ease of use with advanced functionality, including customizable data layouts, powerful analysis, and reporting capabilities. Instead of having a program to log data, another to analyze, and a third to develop report data, Encore includes the functionality of all three into one package, thus shortening the learning curve, and saving time and cost.

CONFIGURATION
Easy-to-use set-up wizards provide rapid hardware configuration. Encore allows you to go from setup to taking measurements in minutes. Users can select one or more available devices from Encore’s Hardware Configuration dialog. Encore allows you to configure the basic acquisition or generation options, such as channel selection, acquisition rate, number of points, and input range. You can also configure start and stop triggers. In addition, within the Channel View table, users can enable (or disable) channels, select measurement type, enable logging, perform mx+b calculation, and more. Channel View configurations can also be shared among multiple projects.

MEASUREMENT
Encore allows you to develop data displays quickly with an intuitive, drag-and-drop interface. Encore also offers the ability to easily change plot colors, overlay channels (including previously recorded data), and access multiple devices. You can also display data in a variety of ways including; charts and graphs, meters, gauges, and tanks. Additionally, you can export data to other formats including Excel, ASCII, and DIAdem.

ENCRYPTION
TRIGGERING
A variety of programmable analog and digital trigger conditions are available for starting and stopping an acquisition within Encore. Analog triggers include Rising Edge, Falling Edge (with hysteresis), Above Level, Below Level, Inside Window, and Outside Window. Digital triggers include Rising Edge, Falling Edge, Level High, or Level Low. In addition, the Duration trigger may be used to stop an acquisition after a specified time.

Analog analysis options make Encore an advanced software package. Features include FFT, power spectrum, statistics, peak value, and RMS calculation. In addition, you can also create custom formulas using Encore’s Create Calculated Signal function. Data can also be viewed in the playback work area. Analysis can be computed on live data as well as logged data (post processing).

ANALYSIS OPTIONS INCLUDE:
• Statistics: Standard Deviation, Mean, and Variance
• Peak: +Peak, -Peak, and Peak-Peak
• RMS
• DC
• FFT
• Power Spectrum
• Minimum
• Maximum

EXPORT TO EXCEL®
Signals can be exported from Encore to Microsoft Excel. When exporting signals from Encore to Microsoft Excel, the following information is exported:
• Signal name
• Export date and time
• Signal units
• Data values

Encore offers sophisticated, built-in test reporting capability which provides the ability to present data in a professional manner. With Encore’s test report capabilities, users can easily develop in-depth test reports. Within Encore’s Project Report tab users can drag signals from the application directly into the report and then enter text, change fonts, import images and print or export reports. Once the report is complete, you even have the ability to acquire new data and easily update any previous report, without re-creating the report. The report can be edited throughout the life of the project.
SPECIFICATIONS

ANALOG INPUTS

OMB-NET6220 VOLTAGE INPUT MODULE

- Number of Analog Channels: 12
- ADC Resolution: 16-bits
- Type of ADC: Successive approximation register (SAR)
- Input Range: ±10.0 V nominal; overflow will occur if |Vin| ≥ (10.2 V to 10.6 V)
- Sampling Mode: Simultaneous
- Data Rates (fs): 1 S/s to 100 kS/s (16 selectable rates)
- Multiple Device, Channel Sync: 10 µs
- Single Device, Channel-to-Channel Matching (Calibrated): 100 ns typical

OVERVOLTAGE PROTECTION

- Gain Error (% of Rdg/Offset Error): Calibrated, maximum (-40 to 50°C): 0.2% ± ±5.0 mV; calibrated, typical (25°C, ±5°C): 0.02% ± ±1.4 mV

STABILITY

- Gain Drift: ±10 ppm/°C
- Offset Drift: ±60 µV/°C
- CMRR (fin=60 Hz): ±73 dB minimum
- Input Bandwidth (-3 dB): 420 kHz minimum

INPUT IMPEDANCE

- Resistance Between any Two AI-Terminals: 200 kΩ
- Input Bias Current: 10 nA

INPUT NOISE

- RMS: 1.2 LSB
- Peak-to-Peak: 7 LSB
- Crosstalk: -80 dB

SETTLING TIME

- 10V Step: 25 µs
- 20V Step: 35 µs

OMB-NET6220 THERMOCOUPLE INPUT MODULE

- Number of Channels: 12 thermocouple channels; 3 internal cold-junction compensation channels
- ADC Resolution: 24-bits
- Type of ADC: Delta-Sigma
- Voltage Measurement Range: ±80 mV

COMMON-MODE RANGE

- Channel-to-COM: ±1.5 V
- Common-to-Earth Ground: ±250 V
- Common-Mode Rejection Ratio (0 to 60 Hz): Channel-to-COM: 95 dB; Common-to-Earth Ground: >170 dB

COMMON-MODE IMPEDANCE

- Differential Input Impedance: 20 MΩ
- Input Impedance: 50 nA
- Input Noise: 1 µVrms

ERRORS

- Gain Error (Using Provided Connectors and Properly Installed Backshells): 0 to 50°C: 0.6°C (1.1°F) typical, 1.3°C (2.3°F) maximum; -40 to 50°C: 1.7°C (3.1°F) maximum
- Data Rate (fs): 2 S/s
- Input Bandwidth (-3 dB): 15 Hz
- Noise Rejection: 85 dB min at 50/60 Hz
- Overvoltage Protection: ±30 V
- Differential Input Impedance: 20 MΩ
- Input Current: 50 nA
- Input Noise: 1 µVrms
- Gain Error (Using Provided Connectors and Properly Installed Backshells): 0.05% at 25°C (77°F), 0.06% typical at -40 to 50°C, 0.1% maximum at -40 to 50°C (-40 to 122°F)
- Offset Error (Using Provided Connectors and Properly Installed Backshells): 15 µV typical, 20 µV maximum
- Gain Error from Source Impedance: 0.05 ppm per Ω source impedance due to input impedance
- Offset Error from Source Impedance: 0.05 V typ, 0.07 µV maximum per Ω source impedance due to input current
- Safety Voltage (Channel-to-COM): ±30 V maximum
- Isolation (Channel-to-Channel): Within each four channel internal module, no isolation between channels; between each four channel internal module, 250 V isolation

MEASUREMENT MODULE

- Number of Analog Channels: 12
- Bridge Completion Full and Half: Internal
- Quarter: External

ADC RESOLUTION

- Type of ADC: Delta-sigma (with analog pre-filtering)
- Sampling Mode: Simultaneous
- Data Rates (fs): 60 kS/s/n, n = 1, 2 to 31
- Multiple Device, Channel Sync: 1 sample period
- Single Device, Channel-to-Channel Matching (Calibrated): 350 nS (maximum)
- Master Timebase (Internal): Frequency: 12.8 MHz
- Accuracy: ±100 ppm maximum
- Nominal Full-Scale Range: ±25 mV/V
- Scaling Coefficient: 2.9802 nV/V per LSB
- Overvoltage Protection Between any Two Terminals: ±30 V
- Accuracy (Excluding Offset Null or Shunt Calibration): Calibrated maximum [-40 to 50°C (-40 to 122°F)], 0.20% of rdg, 0.0625 mV/V offset; Calibrated typical (25°C, ±15°C), 0.05% of rdg, 0.0125 mV/V offset
- Gain Drift: 10 ppm/°C maximum
- Offset Drift: 2.5V Excitation: 0.6 µV/V per °C
- 3.3V Excitation: 0.5 µV/V per °C
- 5V Excitation: 0.3 µV/V per °C
- 10V Excitation: 0.2 µV/V per °C
- Channel-to-Channel Matching (Calibrated): 0 to 1 kHz, 0.15% gain typical, 0.3% gain maximum; 1 to 20 kHz, 0.4% gain typical, 1.1% gain maximum
- Common-Mode Voltage: All Signals to Earth Ground: ±60 Vdc
- Common-Mode Rejection Ratio (CMRR): Relative to Earth Ground Measured with a Balanced Cable: -140 dB @ 0 to 60 Hz
- Relative to EX–: -85 dB @ 0 to 1 kHz
- Excitation Noise: 0.1 mV/Vrms
- Crosstalk: 1 kHz: -110 dB
- 10 kHz: -100 dB
- Shunt Calibration Resistance: 100 kΩ
- Resistor Accuracy: ±25°C (77°F): ±110 Ω, -40 to 50°C (-40 to 122°F): ±200 Ω
- Excitation Internal Voltage: 2.5V, 3.3V, 5.0V, 10.0V
- Internal Power: 450 mW maximum
- External Voltage: 2 to 10V

To Order, Call 1-800-327-4929 or Shop Online at omega.com
OMB-NET6230, OMB-NET6231
HIGH SPEED ISOLATED
VOLTAGE INPUT MODULES

Number of Analog Channels: 12
ADC Resolution: 24-bits
Type of ADC: Delta-Sigma (with analog pre-filtering)
Sampling Mode: Simultaneous
Data Rate Range (fs)
Minimum: 1.613 kS/s
Maximum: 50 kS/s
Data Rates (fs/n): (50 kS/s)/n, n = 1, 2 to 31

Multiple Device, Channel Sync
Skew: Sample period
Single Device, Channel-to-Channel Matching (Calibrated)
OMB-NET6230: 208 nS (maximum)
OMB-NET6231: 125 nS (maximum)

Master Timebase (Internal)
Frequency: 12.8 MHz
Accuracy: ±100 ppm maximum

Operating Voltage Range:
OMB-NET6230: ±10 Vdc nominal, ±10.52 Vdc typical, ±10.3 Vdc min
OMB-NET6231: ±60 Vdc nominal, ±62.64 Vdc typical, ±61.5 Vdc min

Overvoltage Protection: ±100V

Input Coupling: DC
Input Impedance (AI+ to AI-): 1 MΩ

Accuracy (OMB-NET6230)
Typical Range ±10.52 Vdc: Calibrated maximum (-40 to 50°C), 0.13% of rdg, ±631 mV offset; calibrated typical (25°C, ±5°C), 0.03% of rdg, ±642 µV offset

Accuracy (OMB-NET6231)
Typical Range ±62.64 Vdc: Calibrated maximum (-40 to 50°C), 0.13% of rdg, ±31.3 mV offset; calibrated typical (25°C, ±5°C), 0.03% of rdg, ±5.01 mV offset

Input Noise
OMB-NET6230: 70 µVrms
OMB-NET6231: 320 µVrms

Stability
Gain Drift: ±5ppm/°C
Offset Drift
OM-NET6230: ±24 µV/°C
OM-NET6231: ±150 µV/°C

Post Calibration Gain Match
(Ch-to-Ch, 20 kHz): 0.22 dB maximum
Crosstalk (1 kHz): -130 dB
CMRR (fin = 60 Hz)
OMB-NET6230: 126 dB
OMB-NET6231: 116 dB

Isolation: Channel-to-earth ground (continuous); 250 Vrms: channel-to-channel, (continuous); 250 Vrms

DIGITAL I/O
Channels: 8 digital I/O, programmable as a single port, or as individual lines
Power-Up Mode: Inputs pulled low
Connector: DB-9 female
Programmable Input Scanning Modes
Asynchronous: Under program control at any time relative to analog scanning
Synchronous: Data captured synchronously with the analog channels

Input Levels
Low: 0 to 0.8V
High: 2.0 V to 5.0V

Input Voltage Range without Damage:
-0.6V to 5.6V maximum

Input Pull-Down Resistor:
10 kΩ

Output Voltage Range: 0 to 3V (may be externally pulled up to 5.6V without damage)

Output Resistance: 40 Ω

Output Levels:
Refer to OMB-NET6000 Series digital output graph

Sampling: 1 MHz maximum continuous
Output Timing: Outputs are always written asynchronously

COUNTERS
Channels: Up to 4 independent
Resolution: 32-bit
Input Frequency: 20 MHz maximum
Input Characteristics: 10 kΩ pulldown
Trigger Level: TTL
Minimum Pulse Width:
25 ns high, 25 ns low
Programmable Modes:
Counter, encoder

Encoder Resolution:
x1 (default), x2, and x4

Encoder Sources: There are 3 encoder sources (A, B, and Z) that be assigned to any digital pin x

Counter Source: Internal clock, timer 1, timer 2, and digital pin x; one source can be used in multiple counters

Counter Mode Options: Totalize, clear on read, rollover, stop at the top, increment, decrement, rising edge, falling edge

Counter Gate Options: Unused, internal clock, timer 1, timer 2, and digital pin x; one gate can be used in multiple counters

GENERAL
Operating Ambient: -40 to 50°C (-40 to 122°F), 10 to 90% RH non-condensing

Storage: -40 to 75°C (-40 to 167°F), 5 to 95% RH

Ingress Protection: IP 40

Power Consumption:
OMB-NET6220, OMB-NET-6230, OMB-NET6231: 5.5 W typical, 6 W maximum;
OMB-NET6222: 4.1 W maximum;
OMB-NET6224: 6.3 W typical, 6.6 W maximum

Dimensions: 30.5 H x 276.9 W x 169.8 mm D (1.2 x 10.9 x 6.7")

Weight:
OMB-NET-6220: 1.36 Kg (3 lbs);
OMB-NET-6222: 1.22 Kg (2.7 lbs);
OMB-NET6224: 1.3 Kg (2.88 lbs);
OMB-NET6230 and OMB-NET6231: 1.24 Kg (2.7 lbs)

OMEGACARE 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.
To Order  Visit omega.com/omb-net6000_series for Pricing and Details

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OMB-NET6220</td>
<td>12-channel, 16-bit ethernet-based voltage measurement module with BNC connectors (USA version)</td>
</tr>
<tr>
<td>OMB-NET6220-EUR</td>
<td>12-channel, 16-bit ethernet-based voltage measurement module with BNC connectors (European version)</td>
</tr>
<tr>
<td>OMB-NET6222</td>
<td>12-channel, 24-bit ethernet-based thermocouple input module with screw terminal connections. Includes 3 sets of OMB-NET-CN-271 backshell connector kits (USA version)</td>
</tr>
<tr>
<td>OMB-NET6222-EUR</td>
<td>12-channel, 24-bit ethernet-based thermocouple input module with screw terminal connections. Includes 3 sets of OMB-NET-CN-271 backshell connector kits (European version)</td>
</tr>
<tr>
<td>OMB-NET6224-FULL</td>
<td>12-channel, 24-bit ethernet-based strain measurement module for full or half-bridge configurations. Includes 3 sets of OMB-NET-CN-268 (USA version)</td>
</tr>
<tr>
<td>OMB-NET6224-FULL-EUR</td>
<td>12-channel, 24-bit ethernet-based strain measurement module for full or half-bridge configurations. Includes 3 sets of OMB-NET-CN-268 (European version)</td>
</tr>
<tr>
<td>OMB-NET6224-120</td>
<td>12-channel, 24-bit ethernet-based strain measurement module for 120 Ω quarter-bridge configurations. Includes 3 sets of OMB-NET-CN-269 RJ50, 120 Ω quarter-bridge connectors, and also 3 sets of OMB-CA-272-01 RJ50 to RJ50 M/M, 1 m (3') cables (USA version)</td>
</tr>
<tr>
<td>OMB-NET6224-120-EUR</td>
<td>12-channel, 24-bit ethernet-based strain measurement module for 120 Ω quarter-bridge configurations. Includes 3 sets of OMB-NET-CN-269 RJ50, 120 Ω quarter-bridge connectors, and also 3 sets of OMB-CA-272-01 RJ50 to RJ50 M/M, 1 m (3') cables (European version)</td>
</tr>
<tr>
<td>OMB-NET6224-350</td>
<td>12-channel, 24-bit ethernet-based strain measurement module for 350 Ω quarter-bridge configurations. Includes 3 sets of OMB-NET-CN-270 RJ50, 350 Ω quarter-bridge connectors, and also 3 sets of OMB-CA-272-01 RJ50 to RJ50 M/M, 1 m (3') cables (USA version)</td>
</tr>
<tr>
<td>OMB-NET6224-350-EUR</td>
<td>12-channel, 24-bit ethernet-based strain measurement module for 350 Ω quarter-bridge configurations. Includes 3 sets of OMB-NET-CN-270 RJ50, 350 Ω quarter-bridge connectors, and also 3 sets of OMB-CA-272-01 RJ50 to RJ50 M/M, 1 m (3') cables (European version)</td>
</tr>
<tr>
<td>OMB-NET6230</td>
<td>12-channel, 24-bit ethernet-based high speed ±10V isolated voltage input module with screw terminal connections (USA version)</td>
</tr>
<tr>
<td>OMB-NET6230-EUR</td>
<td>12-channel, 24-bit ethernet-based high speed ±10V isolated voltage input module with screw terminal connections (European version)</td>
</tr>
<tr>
<td>OMB-NET6231</td>
<td>12-channel, 24-bit ethernet-based high speed ±60V isolated voltage input module with screw terminal connections (USA version)</td>
</tr>
<tr>
<td>OMB-NET6231-EUR</td>
<td>12-channel, 24-bit ethernet-based high speed ±60V isolated voltage input module with screw terminal connections (European version)</td>
</tr>
</tbody>
</table>

OMB-NET6000 Series USA versions include OMB-NET-TR-60U universal power supply and OMB-CA-1 cable. European versions include the OMB-NET-TR-60U universal power supply and OMB-CA-16 cable. All models include the Encore software and user manual on CD.

Ordering Example: OMB-NET6000, 12-channel Ethernet-based thermocouple module and OCW-1 OMEGACARE™ 1 year extended warranty (adds 1 year to standard 1 year warranty).

### Accessories and Cables

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OMB-NET-TR-60U</td>
<td>Universal power supply, 24 Vdc @ 0.8 A max, requires additional cable (OMB-CA-1 USA version, OMB-CA-216 European version)</td>
</tr>
<tr>
<td>OMB-CA-1</td>
<td>Required cable for use with OMB-NET-TR-60U, 120V USA version</td>
</tr>
<tr>
<td>OMB-CA-216</td>
<td>Required cable for use with OMB-NET-TR-60U, 220V European version</td>
</tr>
<tr>
<td>OMB-CA-74-1</td>
<td>RJ12 shielded cable, 6 conductor, SYNC, 0.3 m (1')</td>
</tr>
<tr>
<td>OMB-CA-192-7C</td>
<td>Ethernet crossover cable, 2.133 m (7')</td>
</tr>
<tr>
<td>OMB-CA-242</td>
<td>Ethernet patch cable, 0.457 m (1.5')</td>
</tr>
<tr>
<td>OMB-CA-242-7</td>
<td>Ethernet patch cable, 2.133 m (7')</td>
</tr>
<tr>
<td>OMB-NET-SPK</td>
<td>Stacking plate kit</td>
</tr>
</tbody>
</table>

1: Up to nine units can be synchronized. The total length of the SYNC cable is not to exceed 2.438 m (8').
2: Ethernet crossover cables should only be used for direct network connections. In particular, attempting to connect a device to a Hub using a crossover cable may prevent that network link from functioning. Some modern routers have become an exception by including logic to detect the crossover cable and allow the network to function.
3: Ethernet crossover cables should only be used for direct network connections. In particular, attempting to connect a device to a Hub using a crossover cable may prevent that network link from functioning. Some modern routers have become an exception by including logic to detect the crossover cable and allow the network to function.

### Replacement Terminals and Connectors

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OMB-NET-CN-268</td>
<td>RJ50, 12-pin screw-terminal connector, full and half bridge completion, 4 packs (for OMB-NET6224-FULL)</td>
</tr>
<tr>
<td>OMB-NET-CN-269</td>
<td>RJ50, 120 Ω quarter-bridge connector, 4 packs (for OMB-NET6224-120)</td>
</tr>
<tr>
<td>OMB-NET-CN-270</td>
<td>RJ50, 350 Ω quarter-bridge connector, 4 packs (for OMB-NET6224-350)</td>
</tr>
<tr>
<td>OMB-NET-CA-272-01</td>
<td>RJ50 to RJ50 M/M, 1 m (3') cable, 4 packs (for OMB-NET6224-FULL, OMB-NET6224-120, OMB-NET6224-350)</td>
</tr>
<tr>
<td>OMB-NET-CN-271</td>
<td>Backshell connector kit for OMB-NET6222</td>
</tr>
</tbody>
</table>