

Temperature Recorders

OMEGALINE® 640
Single and High
Performance Flatbed

Model 640-1MV
High Performance Recorder

\$2779
Basic Unit



Shown with ICSS-316G-12 and CASS-316G-12, Type J, Thermocouple Quick Disconnect Probes, \$28 each, sold separately. See page A-67. See Section A for many other thermocouples.

State-of-The-Art Features

- ✓ Direct Temperature Readout
- ✓ Quartz-Controlled 12 Speed Chart Drive
1, 2, 3, 6, 12, 30 cm/hr
1, 3, 6, 12, 30, 60, 120 cm/min
(1 cm = 0.3937")
- ✓ Up to 3-Channels in a Compact Case

Quality

- ✓ Backed by 40 Years of OMEGA ENGINEERING Experience
- ✓ Rugged, Scratch-Resistant Case
- ✓ Tilt Stand/Carrying Handle

Value

- ✓ Precision Instrumentation
- ✓ Easy-to-Use Disposable Paper
- ✓ Roll Paper
- ✓ 250 mm (10") Width

Modules NOT Field Installable

MODULE J or K

J Iron-Constantan or
K CHROMEALOMEGA®



- ✓ Thermocouples Types J and K
- ✓ Electronic Linearization
- ✓ Cold Junction Compensation
- ✓ 1.5% Accuracy FS
- ✓ Calibrated Zero Offset

200°C Span
Five Ranges:

- 50 to 150°C (-58 to 302°F)
- 100 to 300°C (212 to 572°F)
- 200 to 400°C (392 to 752°F)
- 300 to 500°C (572 to 932 °F)
- 400 to 600°C (752 to 1112°F)

MODULE CV

Variable Ranges (amplify inputs up to 2½ times)
20 Ranges: 0.1, 1, 10, 100, 250 Vac/dc, 0.1, 1, 10, 100, 1000 mA ac/dc
Accuracy: Volts, dc: 0.5% FS, milliamps, dc: 1% FS
Volts, AC: 1.5% FS (Sinewave 40 Hz

MODULE MV

✓ Fixed and Variable Gain
1 mV to 100 V Full Scale



- ✓ -5% to 105% Cont. Zero Offset
- ✓ 0.5% Accuracy
- ✓ 0.2% Linearity
- ✓ High Input Impedance

Five Ranges:
10 mV, 100 mV, 1 V, 10V, 100V
Variable Gain:
Amplify input up to 2½ times

MODULE V

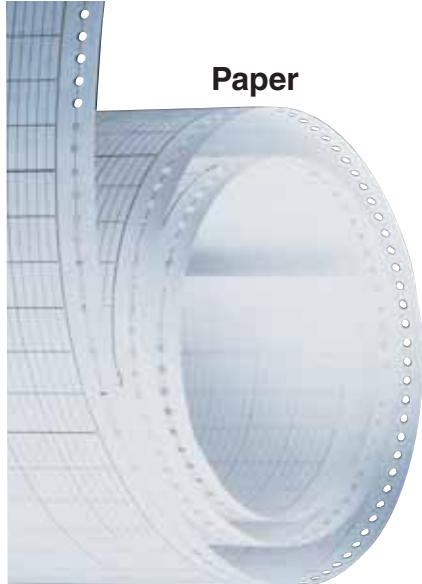
Variable Ranges (amplify inputs up to 2½ times)
17 Ranges: 1, 2, 5, 10, 20, 50, 100, 200, 500 mV; 1, 2, 5, 10, 20, 50, 100, 200 V
Zero Offset: 0, -100%, -200%
in steps: -100% to 105% continuous
Linearity: 0.25%

to 10 kHz) milliamps, ac: 2% FS (Sinewave 40 Hz to 1 kHz)
Linearity: 0.25%



Temperature Recorders

OMEGALINE® Accessories and Options



Paper



Pens

Cold Junction Error: 0.02%/°C

CMRR ac: >50 db

CMRR dc: >90 db

Protection: VDE0411

Protection Class I

Voltage: 120/220/240 Vac ±10%

50 to 60 Hz

Power: 1 channel: 12 VA

2 channel: 15 VA

3 channel: 18 VA

Dimensions:

150 H x 440* W x 270 mm D

(6 x 17.3 x 10.1")*483 mm (19") for

the 3-channel version

Weight: 1-channel: 4 kg (8.8 lb)

2-channel: 4.5 kg (10.0 lb)

**REMEMBER TO ORDER
EXTRA PAPER AND PENS!**

Specifications

OMEGALINE® 640

Chart Accuracy:

30 ppm: 20 to 25°C (68 to 77°F);

70 ppm, 0 to 50°C (32 to 122°F)

Drive Resolution: 0.078 mm per step (128 per cm)

External Chart Control:

Pulse, stop, reverse by TTL

or CMOS signal

Slew Speed: 50/cm/s (2"/sec)

Linearity: 0.25%

Dead Band: 0.5%

Input: Floating, asymmetrical; 250 V max.

TEMPCO:

The greater of: 0.01%/°C or 5 μV/°C

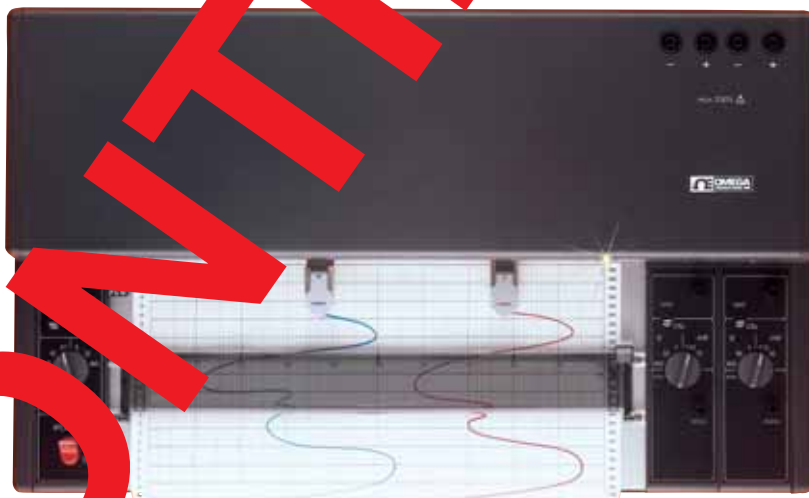
Input Current: 10 mA max.

Thermocouple Inputs:

ANSI Type J and K

Thermocouple Source

Impedance: 1000 Ω max



Model 640 shown smaller than actual size

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model No.)		
Model No	Price	Description
640-1MV	\$2779	Recorder, 1 channel with mV module
640-1V	2809	Recorder, 1 channel with V module
640-1J	2911	Recorder, 1 channel with J module
640-2MV	3736	Recorder, 2 channels with mV modules
640-2V	3946	Recorder, 2 channels with V modules
640-2J	4151	Recorder, 2 channels with J modules
640-3MV	4976	Recorder, 3 channels with mV modules
640-3V	5293	Recorder, 3 channels with V modules
640-3J	5599	Recorder, 3 channels with J modules

* To order recorder with K or CV module replace "J" with appropriate module suffix, same price as J model. (For 2 or 3 channel recorders, modules may be mixed as a special order.)

Unit comes complete with roll of paper, pen (per channel), and manual. OMEGACARESM extended warranty program is available for models shown on this page. OMEGACARESM covers parts, labor, and equivalent loaners. Ask your sales representative for full details when placing an order.

Ordering Example: 640-1MV, 1 channel recorder with mV module, \$2779.

OCW-3 OMEGACARESM extends standard 2-year warranty to a total of 5 years (\$350), \$2779 + 350 = \$3129.

Options		
Suffix	Price	Description
-PS	\$498	Pen Synchronization on 2 channel unit
-PS	498	Pen Synchronization on 3 channel unit
-E01	30	Rear input 8-pin plug (for one V, MV, or CV module)
-E03	498	Electronic pen lift
-E314	328	Carrying case

Accessories		
Model No.	Price	Description
SL-RP	\$15	Paper roll, 250 mm x 32 m (10" x 105')
SL-301	25	Pens, qty 3, red, channel 1
SL-302	25	Pens, qty 3, blue, channel 2
SL-303	25	Pens, qty 3, green, channel 3
PE-1406	125	Reference Book: Fundamentals of Industrial Control: Practical Guides for Measurement and Control



UNITED STATES

www.omega.com
1-800-TC-OMEGA
Stamford, CT.

CANADA

www.omega.ca
Laval(Quebec)
1-800-TC-OMEGA

GERMANY

www.omega.de
Deckenpfronn, Germany
0800-8266342

UNITED KINGDOM

www.omega.co.uk
Manchester, England
0800-488-488

FRANCE

www.omega.fr
Guyancourt, France
088-466-342

CZECH REPUBLIC

www.omegaeng.cz
Karviná, Czech Republic
596-311-899

BENELUX

www.omega.nl
Amstelveen, NL
0800-099-33-44



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• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Glass Bulb Thermometers, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders Relative Humidity Measurement Instruments, RTD Probes, Elements and Assemblies, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples Thermowells and Head and Well Assemblies, Transmitters, Wire

• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters