

Precision Temperature Recorders

180A Series



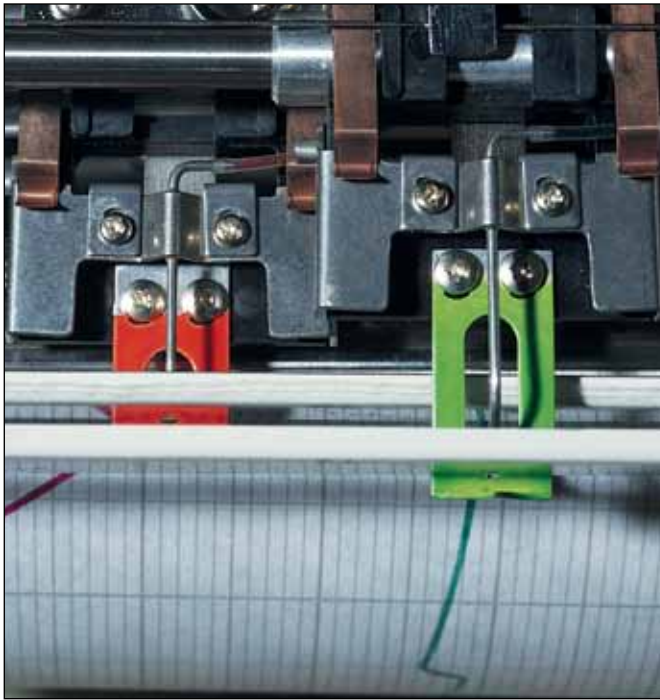
Continuous
1-, 2- and 3-channel



Multipoint
6- and 12-channel

- ✓ Models Available with 1-, 2-, and 3- Channel Continuous Recording and 6- and 12-Multipoint Recording
- ✓ Thermocouple Types J, K, T, E, R and Millivolt Inputs
- ✓ Direct Temperature Readings
- ✓ Rugged Modular Construction with Protective Glass Door
- ✓ Fluorescent Chart Illumination with Easy-to-Read Scale and Pointer
- ✓ All Models Include Six Switch Selectable Chart Speeds

Offering both superlative performance and exceptional value, the OMEGA® 180A Series temperature recorders can be easily incorporated into most process monitoring applications. Continuous recording models are available with 1, 2, or 3 channels; they include high quality sapphire tipped pens for long life. A six-speed chart drive [12.5, 25, 75, 150, 375, 750 mm/hr (1 mm = 0.03937 in)] is standard on all recorders and is switch selectable, eliminating the need to change gears. The multipoint models have either 6 or 12 channels and utilize a unique color dot print method for extremely legible recording. All model 180A recorders accept thermocouple types J, K, T, E, and R. A 0 to 100 mV range is also available, expanding the recording capabilities to other process sensors. Cold junction compensation and linearized electronics are standard on all models. Sensors are easily connected via screw terminals provided at the back of the instrument. Other standard features include an illuminated chart and a protective glass door.



Two-pen continuous writing mechanism used in the continuous recorders, included. Replacement accessories available. See order chart below.

Specifications

Measuring system: Potentiometer

Input span (minimum):

mV: 3 mV

Thermocouple: Types K, J, T, E: 200°C (392°F)

Type R: 450°C (842°F)

Recording mode: 1, 2 or 3-pen continuous writing (removable cartridge pen tip) or multipoint dotting with 6 or 12 points (ink pad dotting with a different color ink at each point)

Balancing speed: 2.5 sec (50 Hz), 2.1 sec (60 Hz)

Chart paper: Z-fold, 180 mm (7") cal. width, 20 m (65') long

Dotting interval: 5 sec (60 Hz), 6 sec (50 Hz)

Accuracy: +0.5% of full scale

Dead band: 0.1% of full scale

Chart speed: 12.5, 25, 75, 150, 375, 750 mm/hr (1 mm = 0.03937")

Ambient temperature: -10 to 50°C (14 to 122°F)

Case: Steel plated with die cast aluminum door

Illumination: Fluorescent lamp

Power requirements

Power supply: 115 Vac \pm 10%, 50 or 60 Hz

Input impedance: 100 k Ω

Source resistance: Up to 10 k Ω

Input Isolation: Measuring terminals to ground terminal: 20 M Ω at 500 Vdc; power supply to ground terminal: 20 M Ω at 100 Vdc

Dielectric strength: Measuring terminals to ground terminal: 500 Vac, 1 minute; power terminal to ground terminal: 1000 Vac 1 minute

Dimensions: 288 H x 288 W x 320 mm D (11.34 x 11.34 x 12.6")

Panel Cutout: 281 mm (11.06") square

Accessories Supplied

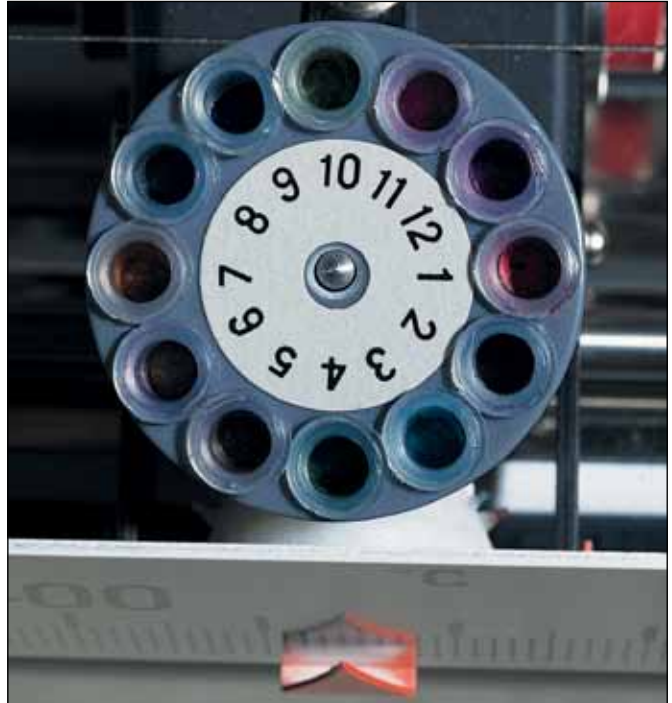
Chart paper: 1 package

Fuse: 1 A, 2 ea.

Mounting bracket: 1 set ea. per recorder

Cartridge pen tip: 1, 2 or 3 per recorder, depending upon model

Ink pad print wheel: 1 per recorder (multipoint shown below)



Ink pad print wheel mechanism used in multipoint recorders, included. Replacement accessories available. See order chart below.

Accessories

Recorder Type	Model Number	Description
Continuous 1, 2, 3	180A-Pen	Pen tip
	Ink	
	180A-INK-01	Red, box of 3 bottles
	180A-INK-02	Blue, box of 3 bottles
Multipoint 6, 12	180A-INK-03	Green, box of 3 bottles
	Ink Pad	
	180A-PAD-06	6-channel
	180A-PAD-12	12-channel
	Ink	
	180A-INK-06	6-channel (box of 6 colors)
	180A-INK-12	12-channel (box of 12 colors)

Chart Paper - Z-Fold

Model No.	Description
180A-CP-(*)	1 package, 180 mm x 20 m (7" x 65')

(*) Specify numeric range to match input module.

Remember to Order Extra Pens and Paper!

180A shown smaller than actual size.



180A controls.

Options (Custom Ordered—Consult Sales)

Ordering Suffix	Description
-01	Carrying handle and feet
-02	DC power supply, specify 12 or 24 Vdc
-19	Pen event marker (one pen models only)
-36	High/low limit alarms (multipoint models only)

To Order

Model	Description
180A-01-66*	1 channel
180A-06-66*	6 channel multipoint
180A-12-66*	12 channel multipoint
180A-02-MV-0-100	2 channel continuous, with 100 mV input module**
180A-02-J-0-1000F	2 channel continuous, with Type J thermocouple input module**
180A-03-MV-0-100	3 channel continuous, with 100 mV input module**
180A-03-J-0-1000F	3 channel continuous, with Type J thermocouple input module**

* Requires one input module per recorder from table at right. To order recorder with module installed, include input module as suffix in place of “-66” in recorder model number.
** Includes input modules, one per channel. Special order models for other ranges are available, consult Sales.

Input Modules (One Required Per Recorder)

Model No.	Description
180A-K-0-1000F	0 to 1000°F
180A-K-0-1500F	0 to 1500°F
180A-K-0-2400F	0 to 2400°F
180A-K-0-800C	0 to 800°C
180A-K-0-1000C	0 to 1000°C
180A-J-0-500F	0 to 500°F
180A-J-0-800F	0 to 800°F
180A-J-0-1000F	0 to 1000°F
180A-J-0-400C	0 to 400°C
180A-T--100-400F	-100 to 400°F
180A-T-0-200C	0 to 200°C
180A-E-0-1000F	0 to 1000°F
180A-E-0-500C	0 to 500°C
180A-R-0-1600C	0 to 1600°C
180A-RTD-0-200C	0 to 200°C
180A-MV-0-100MV	0 to 100 mV

Note: Input modules include chart scale and package of paper. Modules may be ordered separately, but are typically included as suffix to recorder model number to have unit shipped complete. Recorder shipped with operators manual. Other ranges available, consult Sales Department.

For 230 Vac power, add suffix “-230V” to model number; no additional cost.

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

Ordering Example: 180A-06-K-0-1000F, 6 channel multipoint recorder with input range module for K thermocouple 0 to 1000°F range, 180A-CP-0-1000 extra chart paper.

OCW-3 OMEGACARE™ extends standard 1-year warranty to a total of 4 years.