

Cryogenic Digital Thermometers

For CY7 Series Diode Sensors and Platinum Resistance Devices



CYD218 Series

Model CYD218E

\$1425

Eight Inputs

- ✔ Single, Dual or Eight Channel Input
- ✔ For Use With CY7 Series Silicon Diode or Platinum RTD Sensors
- ✔ Sensor Excitation 10 μ Amps
- ✔ Displays K, $^{\circ}$ C, V, Ω

CYD218

- ✔ Range 1.4 to 800 K
- ✔ Serial Interface
- ✔ Alarms

Feature Chart - CYD200 Series

Model No.	Display	Channels	Inputs		RS-232C	Analog Output & IEEE-488	16 high/low alarms	Latching/Non Latching Relays	Datalogger	Printer Output
			Silicon Diode CY7 Series	Platinum 4-Wire RTD						
CYD201A	1	1	✔							
CYD202S	1	2	✔							
CYD202D	2	2	✔							
CYD218E	8	8	✔	✔	✔		✔		✔	✔
CYD218S	8	8	✔	✔	✔	✔	✔	✔	✔	✔

✔ Has this feature



CYD202D



CYD201A Series

Model CYD201A

\$505
Basic Unit



CYD202S

The CYD200 Series units are digital thermometers for use with Silicon Diode Sensors. The CYD201 has one input and display. The CYD202S has two inputs and one display with a front panel switch to select the input desired. The CYD202D offers simultaneous displays for each of 2 inputs. Unlike a thermocouple, the two lead wire in a diode measurement is not an active component of the sensor resulting in greater accuracy. The CYD218 Series has similar specifications to the CYD202 Series with the addition of eight simultaneous displays for Silicon Diodes or Platinum Resistance detectors and RS-232 interface, 16 high/low alarms, latching or non-latching relays, datalogging with memory, printer output.



**CYD201A
Rear Panel**



**CYD202S
Rear Panel**

Specifications:

Model PT-100 Series

Temperature Range:

14 to 873 K (673 for PT-111)

Standard Curve: DIN 43760

Leads: 0.25 D x 15 mm length

Accuracy: Class B, $\pm 0.25^\circ$ (at 0°C)

Repeatability: ± 10 mk

Thermal Response: ≈ 2 sec

Specifications:

Model CYD201A,

CYD202S, CYD202D

Inputs: One or Two

Sensor: CY7 Silicon Diode

Sensor Excitation: $10 \mu\text{A} \pm 0.2\%$ DC

Temperature Range: 1.4 to 473 K

Precision Curve Storage: Curve 10

Ambient Temperature: 15 to 35°C

Electronic Accuracy: $\pm 0.1\text{K}$

Display: 4 LED display for each input

Display Resolution: 0.1 K

Units: K or $^\circ\text{C}$

Measurement Type: 2 lead

Update Rate: 0.2 sec

Power: 115 Vac adaptor

$\pm 10\%$, 50/60 Hz

Size:

CYD201: 91 W x 43 H x 146 mm D
(3.5 x 1.7 x 5.75")

CYD202: 96 W x 96 H x 146 mm D
(3.78 x 3.78 x 5.75")

Weight:

CYD201A: 1 kg (2.2 lb)

CYD202S: 1.4 kg (3.08 lb)

CYD202D: 1.7 kg (3.74 lb)

Specifications:

Model CYD218S, CYD218E

Input: Eight silicon diodes or RTDs

Output: RS-232 Serial Interface, alarms, datalogging, printer support (IEEE-488, relays, and analog output for CYD218S)

Data Memory:

1500 point storage non-volatile memory or continuous to computer

Silicon Diode: CY7 Series

Platinum Resistance Element:

100 Ω , 1000 Ω

Sensor Excitation: $10 \mu\text{A} \pm 0.2\%$ DC for CY7, 1 mA $\pm 0.3\%$

Temperature Range: 1.4 to 475 K for CY7, 1.4 to 800 K for Platinum RTD



**CYD218 Series
Rear Panel**

Precision Curve Storage:

Curve 10 and DIN 43760

Ambient Temperature: 15 to 35°C

Electronic Accuracy: 0.011K at 4.2 K

Display: 5 LCD display for each of eight inputs simultaneously displayed

Display Resolution: 0.001K

Units: K, C, V or Ω

Measurement Type: 4 lead

Update Rate: 16 readings/sec

Power: 100, 120, 220,

240 Vac; +5 - 10%, 50/60 Hz

Size: 217 W X 90 H X 317 mm D

(8.5 x 3.5 x 12") half rack

Weight: 3 kg (6.6 lb)

To Order (Specify Model Number) (See feature chart)		
Model No.	Price	Description
CYD201A	\$ 505	Single input, 1/8 DIN, Silicon Diode monitor
CYD202S	515	Two input temperature monitor, one display-switchable
CYD202D	775	Two input temperature monitor, two simultaneous displays
CYD218E	1425	8 RTD, 8 CY7, or 4 RTD & 4 CY7 temperature monitor, simultaneous display, RS-232, datalogger, and printer output CE
CYD218S	1735	CYD218E with IEEE-488, relays, analog output CE

Each unit supplied with: Sensor Mating Connector, 120 V line cord, and operator's manual.
Ordering Example: CYD218S, PT102: Monitor with eight inputs, and Platinum RTD,
 \$1735 + 70 = \$1805

Accessories (Platinum Resistance Temperature Devices - RTD)

Model No.	Price	Description
PT-102	\$ 70	RTD, 14 to 873 K (2 x 20.3 mm long, 230 mg weight)
PT-103	110	RTD, 14 to 873 K (1.8 x 12.1 mm long, 120 mg weight)
PT-111	115	RTD, 14 to 673 K (1.8 x 5 mm long, 52 mg weight)



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



More than 100,000 Products Available!

• 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