

# Cryogenic Temperature Transmitters

For CY7 Series Diode Sensor and Platinum RTD Elements

## CYTX231 Series



- ✓ Models for Silicon Diode or Platinum RTD Elements
- ✓ Accuracy  $\pm 0.07$  K at 4.2 K Factory Calibration in Memory
- ✓ Input Fully Isolated from Power Supply
- ✓ 4 Lead Measurement
- ✓ Multiple Temperature Range
- ✓ Linearized Temperature Output

The CYTX231 temperature transmitters send linearized data to a remote location for a data acquisition system or a recorder using a 4 to 20 or 0 to 20 mA signal. Standard Curve #10 chart shown in the T section is in memory for the silicon diode sensor and excitation of 10  $\mu$ A is provided.

The CYTX231P operates like the CYTX231SD but uses a 100  $\Omega$  platinum RTD sensor. Excitation provided is 500  $\mu$ A and a DIN 437600 standard curve is provided in memory.

### Specifications

**Inputs:** 1

**Measurement Type:** 4-lead differential

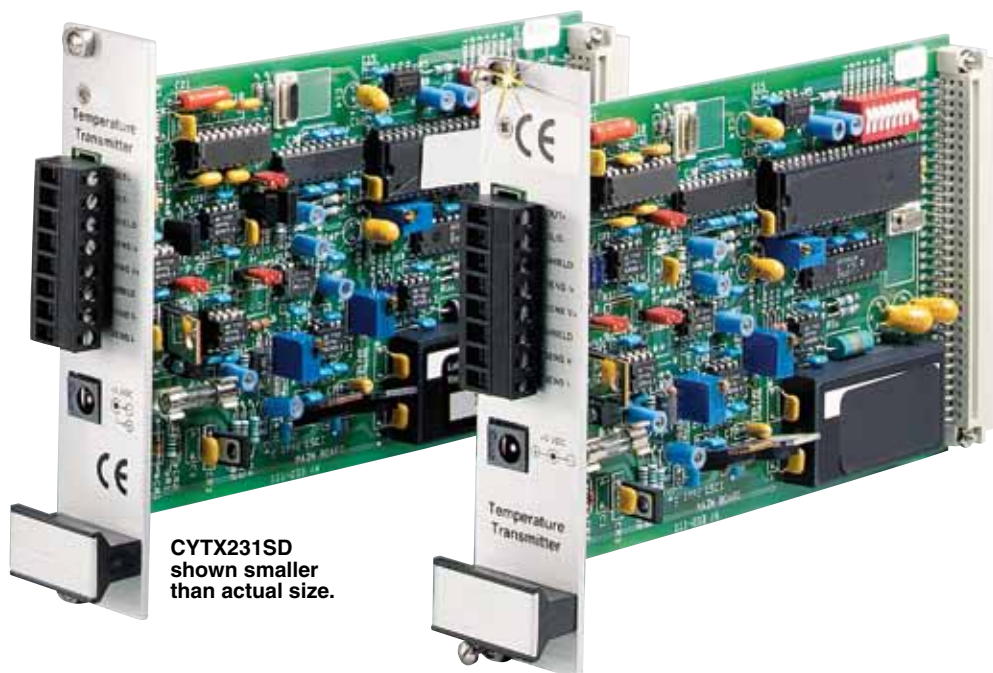
**Sensor:** CYTX231SD, CY7 silicon diode, CYTX231P, 100  $\Omega$  Platinum RTD  
**Sensor Excitation:**

CYTX231SD, 10  $\mu$ A  $\pm 0.1\%$  DC current;

CYTX231P, 500  $\mu$ A  $\pm 0.02\%$  DC current

**Response Time:** 5 readings per sec

**Sensor Range:** CYTX231SD, 1.4 to 475 K, CYTX231P, 30 to 800 K



CYTX231SD shown smaller than actual size.

**Electronic Accuracy:** CYTX231SD,  $\pm 0.07$  K at 4.2 K; CYTX231P  $\pm 0.15$  K at 77 K

**Output Range:**

4 to 20 mA, 0 to 20 mA, 0 to 10V with 500  $\Omega$ , 0.02%, 25 PPM resistor

**Selectable Temperature Ranges:**

6 from 0-20 to 0-1000 K

**Power:** +5 ( $\pm 0.25$ ) Vdc (500 mA); 2.5 W

**Size:** 100 x 160 x 30.5 mm (3.9 x 6.3 x 1.2")

**Weight:** 0.25 kg (0.55 lb)



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

To Order	
Model No.	Description
CYTX231SD	Transmitter for CY7 silicon diode, 5 Vdc power
CYTX231P	Transmitter for Platinum RTD, 5 Vdc power
CYTX231SD-115	Transmitter for CY7 silicon diode, 115 Vac power
CYTX231SD-230	Transmitter for CY7 silicon diode, 230 Vac power
CYTX231P-115	Transmitter for Platinum RTD, 115 Vac power power
CYTX231P-230	Transmitter for Platinum RTD, 230 Vac power power

Each transmitter comes complete with sensor output mating connector, 500  $\Omega$  resistor, and operator's manual.

**Note:** Units are calibrated at no additional cost.

**Ordering Examples:** CYTX231SD-115, transmitter for silicon diode with 115 Vac powered wall mount.

CYTX231P-115, transmitter for platinum RTD, 115 Vac power. OCW-3, OMEGACARE<sup>SM</sup> extends standard 1-year warranty to a total of 4 years.