

THERMOCOUPLE



INTRODUCTION

The Encardio-rite offers T-type thermocouple (Copper-Constantan) for the measurement of internal temperature in concrete structures. It consists of two dissimilar metals, joined together at one end. When the junction of the two metals is heated or cooled a voltage is produced that can be correlated back to the temperature.

FEATURES

- Rugged construction.
- Quick and easy readout.
- Low cost sensor.
- Suitable for monitoring during construction.

APPLICATION

- For verifying design assumptions during construction.
- Temperature rise during process of curing concrete.



SPECIFICATION

Wire type	T-Copper-Constantan
Wire insulation	PFA Teflon
Hot junction temperature	Up to 260°C (Max.)
Cold junction temperature	Ambient
Connector type miniature	Glass filled Nylon
Service temperature	-20°C to 100°C
Thermocouple readout	
Sensor type	T type Copper-Constantan
Input	Two
Display	Two 4 ½ dual digit + one 6 digit
Range	-200 to 400°C
Accuracy	0.05 %
Alarms	High/Low (audible)

Thermocouple measurement consists of a thermocouple wire with two dissimilar conductors (Copper-Constantan) joined at one end to form a hot junction. This end is sealed against corrosion and placed at the required locations of temperature measurement. The other end of the thermocouple wire is connected to a suitable thermocouple connector to form a cold junction.

The thermocouple readout displays a direct reading of the temperature at the installed location and automatically compensates for the temperature at the cold junction.