TS210

THERMISTOR STRING

° **Build multi-point temp strings**

° **±0.075 °C temperature accuracy**

° **Integral titanium thermistor**

° **Marine-grade cable with Kevlar core**

° **RS-485 Modbus RTU signal output**

The NexSens **TS210** Thermistor String provides high accuracy temperature data for profiling in lakes, streams, and coastal waters. It features an integral titanium thermistor secured and epoxied in a protective housing for underwater deployments. A marine-grade cable with braided Kevlar core help ensure reliability in extreme environments.

Each sensor is accurate to +/-0.075 C for high-precision measurements. The exposed titanium thermistor makes direct contact with water, allowing readings to stabilize within 60 seconds. Temperature data is transmitted on a RS-485 Modbus RTU string bus for integration with data loggers and SCADA systems. The string is powered by 4-28 VDC for operation on a 12 or 24 VDC power supply.

TS210 strings are available standard with 1m spacing or at custom intervals to meet project requirements. Cable lengths are available up to 1,219 meters (4,000 feet) with a maximum 250 nodes. Strings terminate in a NexSens UW plug and receptacle connector, allowing additional sections or sensors to be added as required. Optional accessories include a bottom pressure sensor, cable clamps, stainless steel mooring line and communication adapters.

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specifications

Sensor	Thermistor
Range	0 to 45°C (32 to 113°F)
Accuracy	±0.075°C
Resolution	0.01 C
T90 Response Time	60 seconds
Refresh Rate	2 seconds
Maximum Sensors	250
Maximum Length	1219m (4000 ft)
Maximum Depth	200m (656 ft)
Communications	RS-485 Modbus RTU
Power Requirement	4 - 28 VDC
Current Draw Per Node	1.3mA active; 0.35mA sleep; 0.05mA deep sleep
Connector	8 pin, sensorBUS
Dimensions	7.62cm L x 3.3cm Dia. (3.0" L x 1.3" Dia.)
Wetted Materials	Cable – Polyurethane Texin 950; Strain Relief – Nylon; Body & Plug – PVC; Screw – Acetal; Thermistor Tube – Titanium (Grade 5); O-Rings – Silicone, EPDM; Epoxy – Resin Lab EP1282

Ø **3.30cm**

7.62cm

parts list

Part #	Description
TS210-1	TS210 thermistor string with 1m spacing, priced per meter
SS187-L	Custom built 3/16" vinyl coated SS mooring line, priced per meter
TS-Clamp	Mooring clamp kit for NexSens thermistor strings & 3/16" vinyl coated SS wire rope, pack of 2
UW-FL1R	UW receptacle to flying lead cable, 1m
RS485-RS232	RS-485 to RS-232 adapter

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