

Dry Bulb and Wet Bulb* Temperature & Relative Humidity

PRODUCT OVERVIEW

The TEHU-2121-N is a wireless temperature and humidity monitoring device and component of the SensiNet wireless sensor network. It reports highly accurate, real-time ambient level temperature and humidity measurements without wires and is FCC and CE-approved for license free operation worldwide.

The electronics are housed in a rugged NEMA 4X enclosure designed for outdoor installations.

The TEHU family utilizes a highly accurate solid state sensor integrally mounted and features a separate battery compartment, housing a standard "C" cell battery for extremely long life and a convenient mounting bracket for easy installation.

Smart Sensor Benefits

<u>Simple</u> - Install and turn on...the system does the rest. Over the air configuration through standard web browsers eliminates complicated software. Sensors can even receive firmware updates over the network. <u>Robust</u> - Rugged electronics combined with extensive self diagnostics provide a rock solid measurement system which continually monitors and reports system health such as battery voltage and connection status <u>Accurate</u> - Self calibration and auto zero eliminates errors due to drift.

SensiNet Network Benefits

<u>Reliable</u>- Mesh networking provides multiple acknowledged and error checked communication paths ensuring the message always gets through while spread spectrum, frequency hopping radio technology eliminates interference effects. The network is also self healing and able to recover from interruptions by seeking alternate paths.

<u>Flexible</u>- Move, add or eliminate sensors and the network reconfigures itself automatically. <u>Universal</u>- Multiple protocols including Modbus, OPC, SNMP, ODBC, and Web Services ensure system compatibility or operate the system as a stand alone data logging system with local or web based logging. <u>Scalable</u>- The same network can start with a single point and grow to thousands without replacing any components or performance degradation.



Model TEHU 2121-N

* Wet Bulb Temperature Calculated from Dry Bulb Temperature and RH

SPECIFICATIONS

Radio Specifications	
Radio	IEEE 802.15.4 compliant, 2.4 GHz DFSS
Regulatory	FCC Part 15 and CE Approval
Antenna	Internal antenna
Output power	15 dBm
Range	Up to 700 ft/212m range (outdoor, line of sight)Up to 230 ft/70m range (typical indoor conditions)
Operating temperature	-10° C to 50° C
Operating humidity	Up to 100% non-condensing
Batteries	• "C" size 3.6 lithium thionyl chloride battery
Battery life	3 years at 2 minute reporting intervals
Update interval	User selectable 10 sec to 60 minutes
Dimensions	4.5" x 4.5" x 2.5"
Packaging	ABS Box - NEMA 4X
Mounting	Integral Mounting Ears
Temperature Specifications	
Temperature range / accuracy	(-)40 to 125 C / +0.4° C
Humidity range / accuracy	0-100% RH / ±3% RH