

A MiniTalker® Made "Tough" For Harsh Environments

ToughTalker™ is a version of the MiniTalker® intelligent wireless mesh network sensor node for use in Homeland Security Applications, including Asset Tracking, Remote Sensing and Surveillance, Environmental Monitoring and Access Control.



Made In U.S.A.
For HomeLand Security Applications

Specifications

Processor: ATmega128, 8MHz RISC; w/64K Memory; plus 256K EEPROM; and Real-Time Clock.

Radio: 868MHz or 915MHz ISM Band. With whip antenna, range is 200 meters in free air, unobstructed.

External Interfaces: RS-232; Interrupts; I²C; and an Analog signal line to an internal A/D Converter.

External Connection: Two RJ45 8-Pin connectors containing above logical signals plus ground and dc voltage.

Power Requirement: Selection of either external source from 3vdc to 7.5vdc, or internally mounted AA Batteries providing 4.5vdc. Battery life can be > 2 years, depending upon the "sleep time" that is User-determined.

Environment: Operating Temperature -20°C to 70°C; Relative Humidity 20% - 80%.

Controls: DC Power Select Switch, Processor Reset Switch, Diagnostic LED Indicators. On-Board integrated Sensors for Temperature and Battery Voltage Level Monitor.

Embedded software: Each member of the MachineTalker® family of products runs the **SMMP®** Operating System software with its Application Programming Interface used to configure general operating parameters, including power management profiles, sensor/alarm thresholds, mesh network routing profiles, and radio frequency selection.

Applications: The SMMP® software permits groups of Talkers® to automatically form mesh networks or "Communities" wherein they operate as intelligent peers, each with a pre-programmed purpose. Talkers® can be made to acquire and process sensor data; retain Identity that represents its location or purpose; store bulk information like a shipping manifest; share results with or report on status of its Community peers; determine parametric thresholds for alarms; and connect to modems or gateways or web servers as links for global interaction.