Description of Operation

The Tassure Temperature Monitoring System consists of a network of wireless sensors which monitor temperatures at various locations and reports the data to an Ethernet Reader. The Ethernet Reader then reports the data to a centralized computer over an Ethernet cable using TCP/IP protocol. For reporting data over an extended range, the network may incorporate Wireless Extension Readers, which pick up the data packets from the sensors and retransmits the data.

The temperature data is transmitted by means of a temperature data packet transmitted at 915.250 - 917.25 MHz with a power output of 0 dBm, and FSK modulated at 9600 baud. The data consist of a 120 or 344 bit packet which is transmitted once a minute. Once a packet is transmitted, the operating frequency may shift to a channel within 1 MHz of the original operating frequency. The data is received at the Ethernet Reader and transmitted to a computer or file server where it is decoded and displayed using a proprietary software package.