

## Meridian EFOC"Htgswgpe{"Tghgtgpeg

Eqpxgpkgpv"cpf"Hngzkdng"Vkog"cpf"Htgswgpe{"Uvcpfctf"

## The Meridian CDMA Frequency Reference is a time and frequency standard designed for easy installa-

**tion.** The Meridian includes a proprietary dual-band CDMA Cellular / PCS receiver for synchronization to Universal Coordinated Time (UTC). This permits the convenient installation of a small antenna anywhere a cell phone signal is available, even deep inside buildings, and it eliminates the risk of lightning strike damage to your equipment rack. The Meridian includes a 1 PPS and IRIG-B as outputs and a standard network port supports many protocols including the Network Time Protocol (NTP), Telnet, FTP and DHCP. It can be remotely managed via SNMP, SSH, Telnet, or via a local console on the RS-232 serial port and a Web Interface (HTTPS) is provided for status monitoring using your Internet browser.

## **CDMA Timing and Frequency Control**

The Meridian receives its timing information from the Global Positioning System (GPS) via the CDMA mobile telecommunications network used by many cellular telephones. For time and frequency applications, the CDMA base stations act as GPS repeaters, boosting the signal level and making indoor reception possible. Incorporating a dual-frequency receiver with digital cellular (800 MHz) and PCS (1.9 GHz) capability, the Tycho uses the CDMA wireless infrastructure to precisely synchronize itself to UTC to the 10-microseconds level of accuracy. The frequency of the UTC timescale to parts in  $10^{12}$  level-of-accuracy over 24-hour observation intervals.

## Highly-Reliable, Modular Design

A complete suite of time and frequency capabilities with an exceptionally high number and variety of outputs are provided in a 1U chassis. To