

Sentry-2500™

4G/3G BROADBAND ROUTER

CalAmp®



Utility Class Performance and Proven Reliability.

To meet the growing need for faster data access, CalAmp introduces the latest broadband platform for both mobile and fixed applications including public safety, transportation, fleet management, SCADA, telemetry, surveillance, wire line replacement and critical infrastructure environments.

Sentry 2500 provides simultaneous high-speed 4G connectivity in the licensed Broadband Radio Service (BRS) 2496-2690 MHz band and EVDO Rev A 3G connectivity with backward compatibility to EVDO Rev 0 and CDMA 1xRTT.

Based on industrial grade 4G IEEE 802.16e-2005 technology, Sentry 2500 features extensive routing capabilities with an easy-to-use interface and comprehensive remote management. Built-in GPS, two Ethernet ports and an optional 802.11 b/g interface with simultaneous access point and client operation allows connectivity in the office or on the road.

Sentry-2500 is the only truly mobile CPE with integrated WiMAX, EVDO, GPS and Wi-Fi! 4G/3G/WiFi rule-based switching enables control such as segregating some traffic to specific bearers and choosing 4G/3G/WiFi fallback order to ensure maximum network connectivity.

Ensuring the protection of even the most sensitive data, Sentry combines security features like AES 128-bit (FIPS 197) and SHA-1-based PKMv2 (FIPS 186-2) for 4G encryption and authentication. Not only versatile and secure, this ruggedized outdoor device withstands even the harshest conditions with an extended temperature range and the highest power output on the market.

Experience The Advantage

- 4G/3G concurrent network operation
- Industry-standard 802.16e-2005 security sublayer
- 802.16e-2005 EAP-TLS AAA supplicant for authentication and authorization
- Fast 4G handover with no service degradation
- Superior RF performance with MIMO
- AVL support with local and remote GPS data
- High power 802.11b/g local connectivity (optional)



Sentry-2500 Specifications

General

Input Voltage	10 to 30 VDC
Digital I/O	Ignition sense input, External alarm input
Supported Protocols	Ethernet/IP (IPv4 suite: ICMP, IGMP, TCP, UDP, SNMP), DHCP Client and Server, NAT
Device Management	HTTP embedded web server for setup and help, SNMP
TX Current Drain	2.2A @ 13.8 VDC; 3A (with WiFi option)
Diversity Support	2x2 MIMO Matrix A
Security	Industry-standard 802.16e-2005 security sublayer; EAP-TLS AAA supplicant for authentication and authorization

Connectors/Interface

Ethernet Host	Two 10/100 BaseT auto-MDIX, RJ-45
Serial Port	3-wire serial in a USB mini B female form factor
USB Port	Type A Female
Antenna	Dual TNC Female (802.16e-2005 WWAN) Dual SMA-RP (802.11 b/g WLAN) SMA Female (GPS) Dual SMA Female (cellular)
Power	4-pin locking connector
LED Indicators	GPS, STAT, PWR, 3G, WiFi, 4G, ETH0, ETH1

Mechanical/Environmental

Dimensions	7 x 2.2 x 7 inches (17.8 x 5.6 x 17.8 cm)
Weight	4 lbs (1.81 kg)
Mounting	Integrated mounting brackets
Chassis	Die-cast aluminum
Operating Temperature	-22° to +140° F (-30° to +60° C)
Humidity	5% to 95% non-condensing

802.16e-2005 Technology/Bands

Frequency Range	2496-2690 MHz BRS band
Modulation Type	S-OFDMA Time Division Duplex (TDD) QPSK, 16QAM, 64QAM
Data Rate	5 MHz Channels: up to 9.51 Mbps 6.87 mbps Downlink; 2.64 Mbps Uplink 10 MHz Channels: up to 19.73Mbps 14.21 Mbps Downlink; 5.52 Mbps Uplink
Channel Bandwidth	5, 10 MHz
Output Power	Up to 32 dBm, base station controlled

CDMA Technology/Bands

EVDO Rev A (IS-856-A)	800 MHz Cellular/1900 MHz PCS Up to 3.1 Mbps Downlink Up to 1.8 Mbps Uplink
1xEVDO Rev 0 (IS-856)	800 MHz Cellular/1900 MHz PCS Up to 2.4 Mbps Downlink Up to 153.6 kbps Uplink
1xRTT (IS-2000)	800 MHz Cellular/1900 MHz PCS Up to 153.6 kbps Downlink Up to 153.6 kbps Uplink

Approvals/Certifications

FCC	Part 27 and Part 15, Subpart B (Pending)
Carrier Approvals	Various (Pending)



**Industrial
Wireless**

CalAmp's industrial wireless solutions combine utility-class performance and the proven reliability needed for mission critical communications. Our ruggedized line of licensed, unlicensed, and cellular devices provide narrowband, wideband and broadband data connectivity for fixed and mobile applications.

