

Sentry 4G-900 pico Base™ 900 MHz Broadband Base Station



The Sentry 4G-900 pico Base Station is a secure long range wireless platform based on IEEE 802.16e-2005 (mobile WiMAX) technology delivered in a compact form factor. It is a single sector lightweight base station, with a ruggedized enclosure ideal for all-outdoor installations, and provides connectivity to fixed or mobile end points.

Connected via a single Power over Ethernet (PoE) connection and easily provisioned, the Sentry Base reduces operational cost and complexity. Powered by OFDMA radio technology, it is robust in adverse channel conditions and enables Non-Line-Of-Sight (NLOS) operation. Leveraging link adaptation algorithms, modulation and coding are continuously adapted to prevailing link conditions, ensuring an optimal balance between robustness and efficiency.

The use of MIMO radio technology enables peak link performance by maintaining maximum bandwidth and service coverage.

Key Features

- **Long Range:** Transmit and receive diversity for improved reach and NLOS performance
- **High Bandwidth:** MIMO smart antenna technology increases bandwidth and spectral efficiency
- **Usage Models:** Designed for fixed, portable and mobile end points, it supports seamless mobility when used with an ASN Gateway
- **Quality of Service:** Supports ASN Gateway-controlled QoS profiles, which allows operators to classify and prioritize over-the-air traffic
- **Secure:** Built-in features such as two factor mutual authentication, AES encryption and message integrity protection using CMAC

High Speed

Long Range

Ruggedized

Safe/Secure

Diversity

Connectivity

Sentry 4G-900 pico Base Station

Radio and Modem

Frequency

902-928 MHz ISM band

Radio Access Method

IEEE 802.16e-2005 (S-OFDMA)

Operation Mode

TDD

Channel Bandwidth

3.5, 5, 7, 10 MHz

Frequency Resolution

0.25 MHz

Receiver

7dB NF

Antennas

Omni, Sector Panel

Number of Antennas

2

Default Antenna

Omni

Antenna Connectors

2x N-Type, 50 ohm

Diversity Support

2x2, STC/MIMO-SM

Output Power

2 x 0.5W (average)

FFT/Modulation

512/1024 FFT points; QPSK,
16QAM, 64QAM

FEC

Convolution Code and Turbo Code

TPC

10dB

Synchronization

GPS

Network Interface

Network

10/100BaseT Half/Full Duplex IEEE 802.3
CSMA/CD

ASN GW Compatibility

WiMAX Forum R6, Profile C; Compatible
with Tellabs/WiChorus ASN-GW

Configuration and Management

Management

SNMP, WEB GUI

SNMP Agent

SNMP V2C client: MIB II (RFC 1213),
Private MIBs

Software Upgrade

FTP

Remote Configuration

FTP

Mechanical

Dimensions

[HxWxD] 24cm x 20cm x 4cm

Weight

<4 kg

Power Interface

Input

Custom PoE

Power Consumption

39 Watt (max)

Environmental

Operating Temperature

-30°C to +60°C

Operating Humidity

5%-95% non condensing,
weather protected

Standards Compliance

FCC/IC

FCC Part 15.247 subpart C; IC RSS-210

CalAmp
299 Johnson Ave, Ste 110
Waseca, MN 56093

Tel 800.992.7774
Tel 507.833.8819
Fax 507.833.6748

www.calamp.com