



Point One Base Station

A high-accuracy, ruggedized GNSS base station designed for the Point One Navigation RTK Corrections Network. Built from the ground up for high-fidelity corrections and supply chain resiliency, this fourth-generation beacon features custom-built orchestration hardware and integrated backhaul capabilities.

TECHNICAL SPECIFICATIONS (GEN 4)

Receiver Architecture

Quad-band, quad-constellation GNSS engine.

Internal Hardware

Custom-built mainboard for power orchestration and data management, integrated with an advanced modem.

Connectivity (Backhaul)

Integrated LTE for primary or backup data transmission.
Dual SIM support: Physical SIM slot and secondary eSIM backup.

Signals Tracked

GPS, GLONASS, Galileo, and BeiDou.

Frequency Bands

L1, L2, L5, L6, and E6.

Security & Monitoring

Integrated sensors to detect and alert on physical movement or tampering.
Network-side monitoring for sky-view changes and location shifts.

POWER & BATTERY

Primary Power Supply

120-230V AC (Standard electricity cable).

Power Consumption

2W (Typical).

POE Options

Power over Ethernet (PoE) available via injector for combined power and internet.

Alternative Power

24V DC compatible.

Backup Battery

Integrated Lithium battery providing up to 5 days of autonomous operation during power outages.

Cabling

Standard electricity cabling

BASE STATION CHARACHERISTICS

Dimensions

23 x 15 x 18 cm (Length x Width x Height)

Weight

2.8 kg / 6.2 lbs.

Installation

Designed for mounting at the highest available point with an unobstructed 360° sky view.

Backup Battery

Integrated Lithium battery providing up to 5 days of autonomous operation during power outages.

Standard Package

GNSS Beacon: Main receiver unit with integrated antennas.
Support Box: Mounting chassis that ties the beacon to the mast.
AC/DC Converter: Standard power supply unit.

Standard Package continued

Mounting Hardware: Pole mounting kit and U-bolts.
Protection: Extension cord protection and weather-resistant cabling.
PoE: Available upon request.