

GB30

Your local reference base.
Your NTRIP Caster.

One low-power ARM device generates GNSS reference data and serves professional RTK clients.



Reference-based product view. Recorded screen values are illustrative; the historical 0/128 display does not override the confirmed 256-client default.

1.5W

Typical GB30 power

2W

Full-load GB30 power

256 + 8

Default clients / uplinks

4,000*

Direct NTRIP clients

* Up to 4,000 simultaneously online clients applies to direct NTRIP under the configured client policy. The figure is not a tunnel concurrency specification.

LOCAL BASE STATION MODE

Generate and distribute.

Own reference source + active Caster. Accept independent sources from up to eight uplink reference stations.

UPLINK BASE STATION MODE

Extend the reference layout.

Upload an independent local source to a bound Caster. The uplink GB30's own local Caster is disabled.

Fixed indoor main unit / fixed outdoor antenna.

Route the GNSS coax to the existing SMA antenna input. A network tunnel avoids a dedicated public IP, port forwarding and a dedicated line; internet access and compatible clients remain necessary.

GB30 technical specification

Product-owner specifications and supplied English user guide 1.0.34. Match the final configuration to the installed firmware.

Product role

Integrated GNSS local reference base + NTRIP Caster

Computing platform

Low-power ARM processor

Local Base Station mode

Own reference source and active Caster; accepts independent uplink sources

Uplink Base Station mode

Uploads an independent local source to a bound Caster; its own Caster is disabled

Default client policy

256 simultaneous client terminals

Default uplink allowance

8 uplink reference stations

Available reference sources

1 local source + up to 8 independent uplink sources in the described 8 + 1 configuration

Maximum direct NTRIP clients

Up to 4,000 simultaneously online; a raised limit/configuration is distinct from the default policy

Network tunnel

No dedicated public IP, port forwarding or dedicated line required; internet access and a compatible client remain necessary

Tunnel capacity

Confirm for the selected deployment; the direct NTRIP maximum does not apply

Network setup

Wi-Fi setup through Android settings is documented; confirm supplied network hardware/configuration

Reference coordinates

Survey-in or known fixed coordinates; verify reference frame, height type and antenna reference

Source access

NTRIP sourcetable discovery and mountpoint selection; local and uplink sources remain separate

Initial pairing

Six-digit code valid for 15 minutes; a valid binding survives code expiry

Monitoring interface

Touchscreen; GNSS, network, NTRIP and system cards; clients and uplink sessions monitored separately

Configuration management

Separate profiles by mode; save and Apply to device are separate operations

Typical / full-load power

1.5W / 2W (product-owner specification)

Energy at continuous typical load

13.14 kWh/device/year at 1.5W for 8,760 hours (calculated)

Antenna connection

Outdoor fixed GNSS antenna; coaxial cable connects to the main unit's SMA antenna input

Installation

Main unit fixed indoors with stable power; antenna fixed outdoors with clear sky

Documentation baseline

English user guide 1.0.34; match configuration to installed firmware

Confirm before ordering: electrical input and supplied power adapter; GNSS receiver/frequency/output configuration; dimensions, weight, temperature and protection rating; antenna/cable/mounting contents; tunnel capacity and service terms.

Planning limits: an 8 + 1 layout and approximately 10km station spacing do not establish a guaranteed coverage boundary. Sources remain separate; VRS, fusion and automatic nearest-station selection are not claimed.