ENGLISH PRODUCT DATASHEET

High-Precision Antenna Systems

Designed for high-precision terminals, base stations and integrated equipment, with multi-constellation coverage, a stable phase center, RF performance and outdoor reliability.

YueeTek | Product type: High-Precision Antenna Systems | Document date: 2026-09-21

01 Product Overview

The high-precision antenna system is designed for high-precision positioning terminals, reference stations and integrated equipment, with attention to multi-constellation reception, phase-center stability and reliability in demanding environments.

It covers common GPS, GLONASS and BeiDou bands and provides RHCP polarization with 360-degree horizontal coverage for projects that require stable satellite signal reception.

02 Core Specifications

Frequency range	GPS L1/L2/L5/L-band; GLONASS G1/G2; BeiDou B1/B2/B3
Zenith gain	>=5.5dBi
Phase center error	<+/-2mm
Voltage standing wave ratio	<=1.5
Zenith axial ratio	<=3dB
Polarization and coverage	RHCP; 360-degree horizontal coverage
Impedance	50 ohm
LNA gain	40+/-2dB
Noise figure	<=1.8dB
Output standing wave ratio	<=2.0
Differential delay	<=5ns
LNA current	<=48mA
Mechanical dimensions	D150 x H58.4mm
Connector	TNC-K
Weight	<=450g
Operating temperature	-45 to +70 C
Protection	IP67

03 Key Features

Multi-constellation coverage

Covers common GPS, GLONASS and BeiDou frequency bands.

Stable phase center

A phase center error below +/-2mm supports high-precision positioning applications.

RF performance

Balances gain, standing wave ratio, axial ratio and multipath-related performance.

Integrated LNA

Provides 40+/-2dB gain while controlling noise, standing wave ratio and differential delay.

Outdoor protection

Supports an operating range from -45 to +70 C with IP67 protection.

Project adaptation

Configuration is confirmed for terminal, base-station or integrated-equipment requirements.

04 Typical Applications

High-precision terminals

Provides antenna reception for survey, inspection and mobile positioning terminals.

Reference stations and base stations

Designed for continuously operating high-precision positioning infrastructure.

Unmanned systems

Used for positioning reception on UAVs, robots and autonomous platforms.

Industrial integrated equipment

Fits industry equipment that requires stable GNSS signal reception.

05 Accessories and Options

- **RF cable assemblies.** Connector type and cable length are confirmed with sales.
- **Mounting and adapter components.** Adaptation is confirmed against the installation structure.
- **Feeding and protection options.** Configured for electrical and environmental project requirements.
- **Project customization.** Frequency, connector, mechanical structure and delivery requirements can be reviewed.

Source: YueeTek public product page, https://yueetek.com/en/products/antenna/, reviewed 2026-09-21.