



GNSS Antennas **TSA1000**

Four-system full-frequency
high-precision GNSS Antenna

TSA1000 Survey GNSS Antenna

TSA1000 is an external measurement antenna that covers four systems, namely GPS, GLONASS, BDS and GALILEO, providing full-frequency compatibility. It meets the current requirements of multi-system compatibility for measurement devices. It finds extensive applications in geodetic surveying, marine measurement, channel surveying, land surveying, seismic monitoring, bridge deformation monitoring, landslide monitoring, container operations at ports, and other fields within the surveying industry.

SPECIFICATION

SIGNAL RECEIVED

GPS	L1/L2/L5
GLONASS	L1/L2/L3
GALILEO	E1/E5a/E5b/E6
BDS	B1/B2/B3
QZSS	L1/L2/L5/L6
SBAS	L1/L5
NavIC (IRNSS)	L5

L-Band

ANTENNA FEATURE

Nominal Impedance	50 Ω
Polarization	RHCP
Axial Ratio	≤ 3dB
Gain at Zenith (90°)	1164-1300MHz 5.5dBi(maximum) 1525-1615MHz 5.5dBi(maximum)
LNA Gain	40dB(typical)
Noise Figure	≤ 2dB

Output/Input VSWR ≤ 2.0

Operation Voltage +3.3VDC to +12VDC

Operation Current ≤ 45mA

Group Delay Ripple < 5ns

MECHANICAL

Dimensions	φ152mm*62.2mm
Connector	TNC female
Weight	≤ 500g
Mounting	BSW5/8"-11 screw, dept12-14mm

ENVIRONMENTAL

Temperature	Operating -40 °C to +85 °C Storage -55 °C to +85 °C
Humidity	95% non-condensing
Protection	IP67
Regulatory Compliance	NGS, FCC, CE, RoHS

www.toknav.cn info@toknav.cn

Manufacturers may update parameters at any time, please refer to the latest product information.



Europe, North & South America
Tel & WhatsApp: +1 (323) 847-7713 (Ian)
Asia, Africa & Oceania
Tel & WhatsApp: +86 139 2607 5986 (Jeffrey)

Guangzhou Toksurvey Information Technology Co., Ltd
No. 9 Caipin Road, Building B, Room 801-6,
Huangpu District, Guangzhou, China