

Timing Antenna HX-TR201A

The Timing Antenna HX-TR201A is a cutting-edge solution engineered to deliver exceptional performance across a wide range of applications, including timing synchronization, mobile operations, precision navigation, and military-grade deployments. It boasts comprehensive signal support for GPS L1/L2, BDS B1C/B1I/B2I, GLONASS L1/L2, and GALILEO E1, ensuring robust compatibility with global satellite navigation systems. This versatility makes it an indispensable tool for industries requiring pinpoint accuracy and unwavering reliability.

Designed with advanced technology, the HX-TR201A features a highly circular wideband patch element paired with a state-of-the-art Low Noise Amplifier (LNA). This powerful combination delivers a truly circular response across its entire bandwidth, setting a new standard for multipath signal rejection. The result is cleaner, more reliable signal reception even in challenging environments plagued by reflections or interference. Additionally, its outstanding axial ratio remains consistent across all supported frequencies, guaranteeing uniform performance and enhanced signal integrity no matter the conditions.

Built to endure, the HX-TR201A is encased in a rugged, industrial-grade weatherproof enclosure with a permanent mount design, ensuring long-term durability and stability. Equipped with an N-K connector, it offers seamless integration into various systems. This antenna thrives in extreme conditions, operating flawlessly at temperatures as low as -55°C , making it a top choice for deployments in harsh climates or remote locations. The conical radome deters bird interference and efficiently shedding ice or snow to maintain optimal functionality year-round.



APPLICATIONS

- High Accuracy & Mission Critical Global Positioning and Timing
- Communications, Finance & Infrastructure Sync
- Precision Agriculture, Mining & Construction
- Military & Security
- Law Enforcement & Public Safety

FEATURES

- Superb circular polarization
- Outstanding signal-to-noise ratio
- Robust multipath rejection
- Unmatched out-of-band rejection
- Operates reliably at temperatures as low as -55°C
- N-K connector enhances precision timing systems
- Ideal for harsh environments

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PERFORMANCE

Signal Received	
GPS	L1/L2
BDS	B1C/B1I/B2I
GLONASS	L1/L2
GALILEO	E1
Impedance	50 ohm
Polarization	RHCP
Axial Ratio	≤3dB
Azimuth Coverage	360°
Peak Gain	4.0dBi
Phase Centre Variation	±2mm

LNA

LNA Gain	37±2dB
Output VSWR	≤2.0
Passband Ripple	±2dB
Operation Voltage	+3.3~+12VDC
Noise Figure	≤2dB
Operation Current	≤45mA
Group Delay Ripple	≤5ns

MECHANICAL

Size	Φ69×48.5mm
Weight	≤260g
Connector	N-K
Mount	Through-hole mounting with an M18 nut on a flat surface

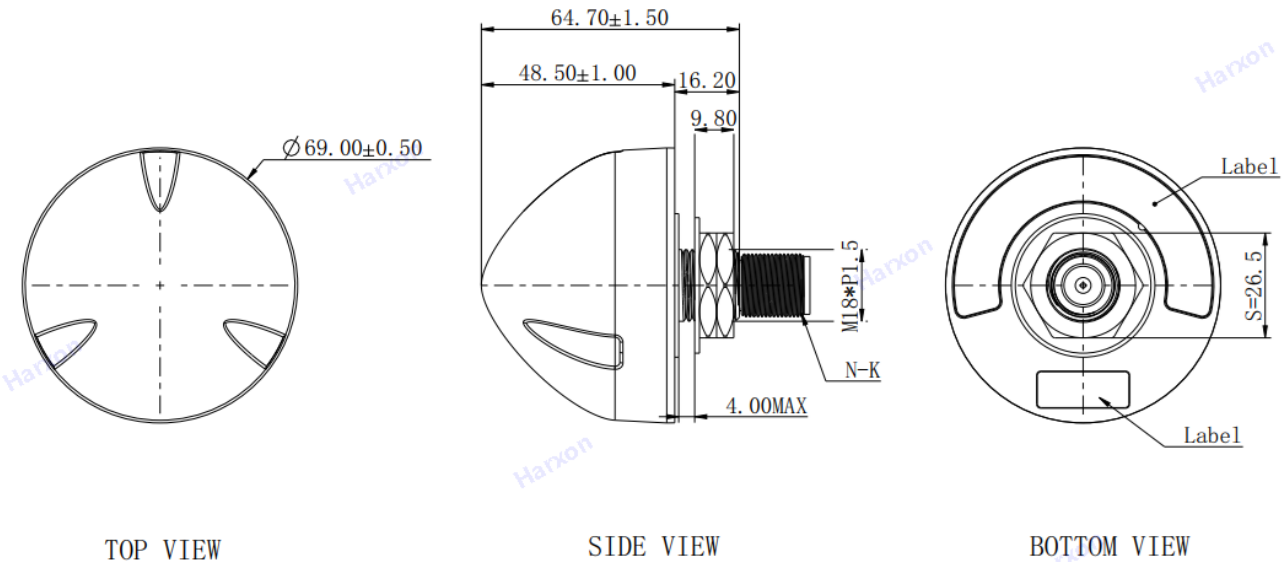
ENVIRONMENTAL

Operating Temperature	-55℃~+85℃
Storage Temperature	-55℃~+85℃
Humidity	95% Non-condensing
Vibration	MIL-STD-810D Method 514.3-1
Shock	MIL-STD-810G Method 516.6
Salt Fog	96H
EMC (RF port electrostatic discharge)	
Contact 8 kV, Air 15 kV, 10 times	
IP Rating	IP69K/IP67

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STRUCTURE (Unit: mm)



Undeclared Tolerance: ±0.3mm