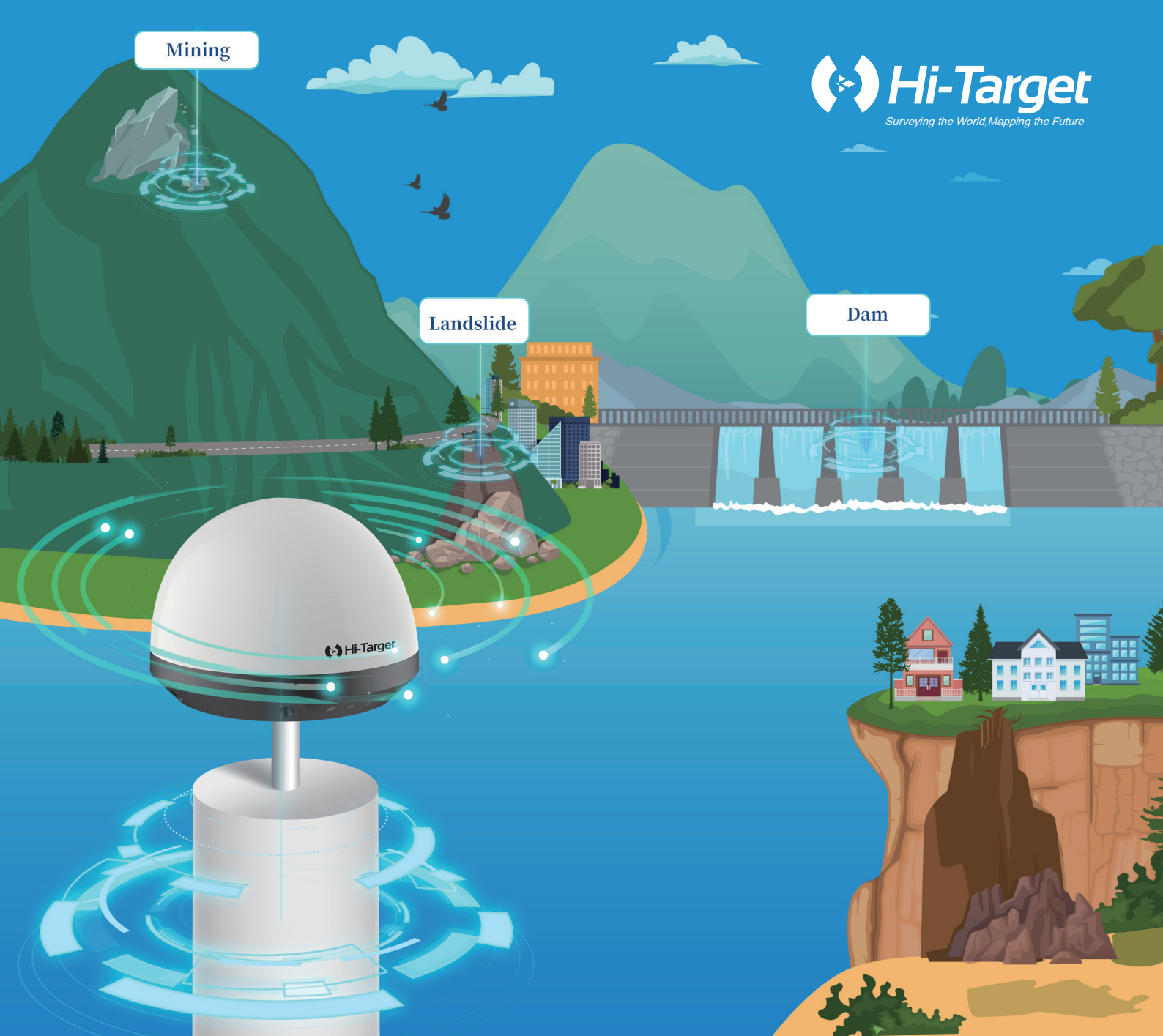


Mining

Landslide

Dam
















MS401 Receiver



The MS401 receiver is a compact and all-in-one GNSS receiver with low power consumption, high performance, and high stability. It adopts a Linux operation system, built-in high-performance positioning board, antenna, MEMS sensor, and a variety of 4G modules, supporting MEMS combination of decoding, remote control, different configuration modes, intelligent communication, and other important functions. Simultaneously, with a simple and small integrated structure and several features of easy installation, IP68 protection level, and ultra-low power consumption, it is suitable for the monitoring of geohazard, mines, reservoirs, slopes, bridges, and other fields.

● Main Functions and Features

-  Three constellations with eight bands.
-  Large capacity storage: 16GB + external storage (TF card).
-  Built-in MEMS sensor with trigger function supports dynamic adjustment of monitoring frequency.
-  Low power consumption: average power consumption ≤ 2.6W (long link) saves the cost of power supply.
-  The indicator is tilted at 45°, which fully considers the visual habit.
-  High integration: integrated GNSS board, MEMS sensor, and NB-IOT modules.
-  Intelligent communication: built-in ESIM card supports an intelligent switch between internal and external cards.
-  Configuration mode: support configuration by Bluetooth APP, web terminal, and remote control software.
-  High security: built-in firewall, high-security port, and other reliable functions for system management.
-  High level of protection: an industrial design with an IP68 protection rating for shockproof, drop proof, and lightning protection.
-  Functions of self-checking for working status, self-diagnosis, self-healing, power loss data protection, and real-time clock calibration.
-  User-friendly: the monitoring system is easy-to-install and supports remote configuration. It can be configured within 1 minute.
-  Support solution of common reference station. The interval between the reference station and monitoring station is ≤ 15km.

● Specification

GNSS Specification	Satellite Signals	Channels	Frequency Band
		GPS	L1、L2、L5
		GLONASS	L1、L5
		BDS	B1、B2、B3
	Accuracy	RTK Horizontal	±(8mm +1x10 ⁻⁶ D)
		RTK Vertical	±(15mm + 1 x10 ⁻⁶ D)
		Static Horizontal	±(2.5mm+ 0.5x10 ⁻⁶ D)
		Static Vertical	±(5mm+ 0.5x10 ⁻⁶ D)
		Initialization Time	Typically <10 seconds
		Initialization Reliability	>99.9%
Data Formats	RTCM 3.0, RTCM 3.2, RAW		
Data Frequency	Output	0s~ 24h (Optional)	
	Transmission	0s~ 72h (Optional)	
Network Communication	RS485	Support multiple sensor access	
	LAN	Transmission Rate: 10/100 Mbps	
	Bluetooth	Less than 10m	
	NB-IOT/4G/LoRa	2G/3G/4G NB-IOT/LoRa (Optional)	
MEMS	Inclination Angle: ±90° Accuracy: 0.1° Accelerometer: ±2g Accuracy: 1mg MEMS Trigger Function: support dynamic adjustment of monitoring frequency		
I/O Interface	Light/Slot	Lights*4: Satellite, Power, Communication, LAN 1×SIM card, 1×TF card, 1×USB port	
	External	1 LoRa antenna interface, 1 data cable interface (including signal interfaces for power supply, RS232, RS485, LAN)	
Physical	Average Power Consumption of the Whole Machine: ≤2.6W (acquisition: 15s, upload: 15s) Input Voltage Range: 9~28V-DC/1A Weight: ≤1.4kg Size: Ø185mm*143mm		
	Temperature	-40℃ ~ 85℃	
	Humidity	95% humidity with 25℃ ~55℃	
	Protection Level	IP68	
	Salt Spray	96 hours	
System	Configuration	Operation System	Linux System
		Storage	16GB+TF card



AUTHORIZED DISTRIBUTION PARTNER

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