

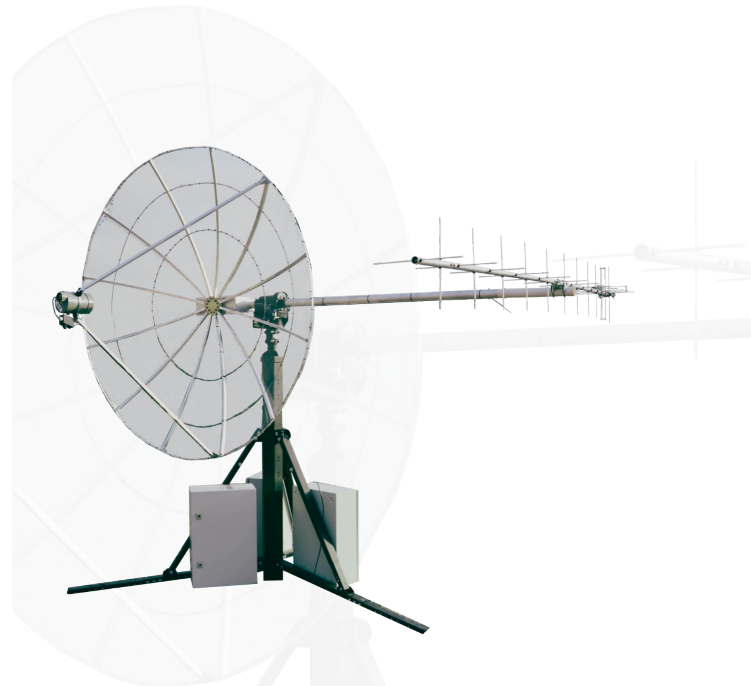
WISESAT GROUND STATION

OVERVIEW

WISESAT ground station is a flexible and turnkey solution to nano & picosatellite control in the UHF, VHF and S-band Ranges.

The station includes all radio frequency, power distribution and networking systems for autonomous and secure remote operations. The ground station consists of a Yagi antenna, operating in UHF frequencies and parabolic antenna for S-band frequencies.

Additionally, it has three cabinets, which contain necessary elements for software and communications. This results in a very densely packed system that makes it highly portable despite its size of 2 meters from ground to stand of the antennas.



LEAD TIME	6 - 10 weeks + installation
STARTING COST (EXCLUDING INSTALLATION)	55,000 €

KEY FEATURES

SELF-CONTAINED & AUTONOMOUS OPERATION

- Network module and necessary devices for communication through servers
- UHF transceiver and S-band transceiver in additional of usage of software defined radio (SDR)

TURNKEY INSTALLATION & INTEGRATION

- WISESAT provides a complete installation and integration of the ground station solution to start remote communications in UHF, VHF and S-band frequencies
- SW Integration included

MECHANICAL STRUCTURE

- Compact Setup that assures stability against winds (up to 120 km/h)

REMOTE OPERATIONS & SECURE CONNECTION

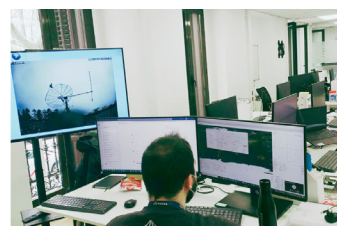
- 3G/4G Backhaul
- Live View Full HD Camera
- Firewall Connection

ANTENNA & ROTATOR SYSTEM

- Rotator pointing accuracy of 0.5°
- Rotation speeds up to 6°/s
- 1.9 m diameter S-band Antenna

TECHNICAL FEATURES

Power	220V Input, Uninterrupted Power Supply Included
Connectivity	3/4G Backhaul, Firewall Included
RF Transceivers	Duplex Operation with 3x dedicated transceivers and 1x SDR
RF Antenna Gain	UHF → 15 dB, S-Band → 31.35 dB
RF UHF Chain	RX LNA Gain → Up to 47 dB, RX LNA NF → < 2 dB
RF S-Band Chain	RX LNA Gain → Up to 66 dB, RX LNA NF → < 2 dB
RF Filter	5 MHz Bandpass filter on Both Bands
Video	Full HD WebCam
Rotator	0.5° Accuracy & 6°/s Rotation Speed
Weatherproofing	IP66 & 120 km/h winds
Weight & Size	220 kg, 2.5x2.5x2.5 m



Learn more at <https://www.wisekey.com/wisesat/>