



MOBILE GROUND STATION (MGS)

Mobile system for ground-based air
situational awareness¹

Einsatzzweck: The Mobile Ground Station (MGS for short) is a mobile traffic receiving station. As a sensor for air traffic data, it receives ADS-B (Automatic Dependent Surveillance - Broadcast) and FLARM (Flight Alarm) signals from surrounding air traffic participants (e.g. gliders, helicopters, motorized aircraft). These signals are fed via LTE into the Droniq UTM (UAS Traffic Management) system, where they are analyzed together with other data sources. In addition, the MGS sends its own position to the Droniq UTM, where it is also visible. With Droniq's UTM web access, the pilot can display all traffic data available in the UTM in a merged form: in this way, the MGS

completes the air situation display of the UAS pilot.

Thanks to its compact, modular design (tripod, antenna boom, receiver) and IP67 certification, the MGS can be operated quickly at a wide variety of locations. The power supply, for example via a power bank, further contributes to self-sufficient use.

The main field of application is the support of the UAS remote pilot when flying beyond visual range in combination with a HOD4track.

¹ The product is delivered ready for use in Germany. On request, we offer solutions for use in other countries.

Product features:

- ADS-B & FLARM Receiver
- LTE Connectivity
- Droniq UTM Integration
- GNSS Multi-Constellation
- Mobile and modular



Technical data:

HARDWARE

Antennas and alignment

- Antennas and alignment
- LTE, FLARM & ADS-B: vertical on boom

Weight

- Receiver: 0.5 kg
- Flightcase: 16 kg

Dimensions

- Receiver: 130 x 175 x 45 mm
- Flightcase: 1270 x 420 x 240 mm

Operating temperature

-30°C bis +40°C

CONNECTIVITY¹

Technology
LTE 4G Cat1

SENSORS

GNSS

- Systems: Multi-Constellation (GPS, GALILEO, GLONASS, EGNOS)
- Precision: 2.5m CEP

FLARM Receiver

- Frequency: 868 MHz
- Sensitivity: -130 dBm
- Range: About 40 km (depending on positioning)
- License: Lifetime FLARM license

ADS-B Receiver

- Frequency: 1090 MHz
- Sensitivity: -90 dBm
- Range: About 400 km (depending on positioning)

Antenna characteristics

- Omni-direktional

POWER SUPPLY

Source

- USB, mobile power supply

Power consumption:

- 1,5 W

USB

- Voltage: 5 V – 12 V
- Current: 2 A

SCOPE OF DELIVERY

- MGS including connectivity
- FLARM, ADS-B and LTE antenna
- Antenna boom with GNSS antenna
- Tripod
- 3x antenna cables
- Power supply cable with alligator clips
- USB cable
- LTE connectivity
- FLARM license
- High quality flight case

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