

OGS

ODALISS Ground Station



The **ODALISS Ground Station** addresses the major challenge to afford accurate and high-bandwidth connectivity for Low Earth Orbit (LEO) satellites in point-to-point up/downlinks minimizing costs.



SDR OVER
ETHERNET



19 INCH STANDARD
ENCLOSURE



GREATEST
VERSATILITY



SATELLITE
TRACKING

The **ODALISS Ground Station** is a terrestrial radio station for satellite communications with the main transceiver based on an embedded computer connected to a software defined radio (SDR) device covering most satellite bands including UHF, VHF and S bands.

Main features:

- 19-inch rack standard enclosure.
- SDR over Ethernet new state-of-the-art technology will allow to connect to a local Network through a 16-port switch.
- Open-source software for TTC and satellite tracking.
- Connection system implemented by TCP/IP protocol with Ethernet gigabit switch.
- Spid MD-01 control unit integrated for Alpha Spid BIG-RAS Rotor.

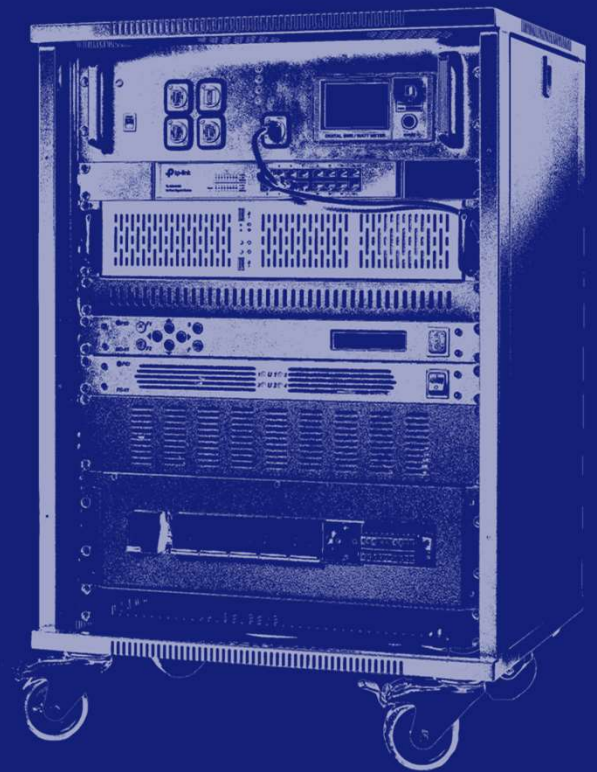
SPECIFICATIONS

SOFTWARE

- GNU Radio based signal processing.
- COSMOS for telemetry and telecommand.
- GPREDICT for satellite tracking.
- Ethernet remote control via TCP/IP protocol.

RF

- Data link packaging fully configurable (AX25/HDLC by default).
- User-configurable modulation (FSK, BPSK implemented by default).
- Tx frequency band from 400 MHz to 480 MHz (can be modified on request).
- Tx gain: 34 dB
- Rx frequency band up to 3.5 GHz.
- Antenna switch selector.
- Doppler effect control.
- Half-duplex communication.



TRANSCEIVER CONNECTORS

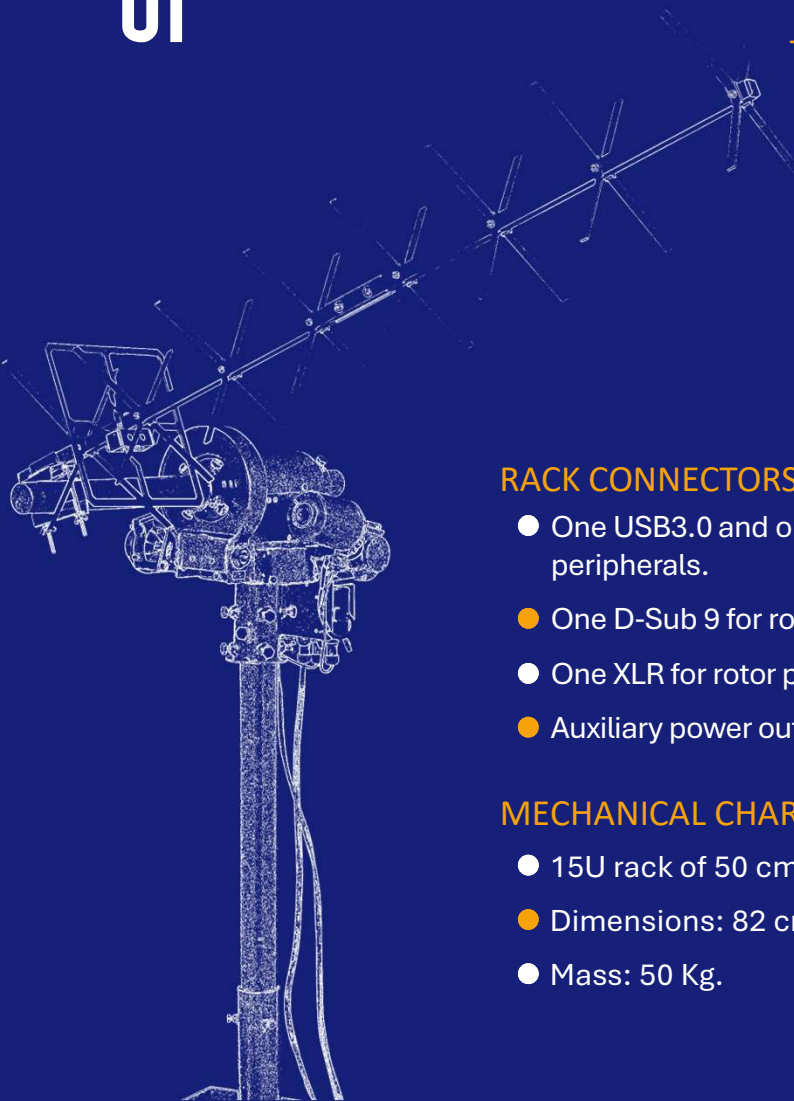
- 14 RJ45 available for the OGS LAN.
- Two USB2.0, one USB3.0, and one HDMI for peripherals.
- One D-Sub 9 for antenna switch controller.
- Two N-type for RX and TX signals.
- One NAC3MPA for antenna AC power supply.

RACK CONNECTORS

- One USB3.0 and one HDMI for the OGS computer peripherals.
- One D-Sub 9 for rotor control via .
- One XLR for rotor power supply.
- Auxiliary power output 220V AC socket.

MECHANICAL CHARACTERISTICS

- 15U rack of 50 cm of depth.
- Dimensions: 82 cm x 54 cm x 50 cm.
- Mass: 50 Kg.



For more info:

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