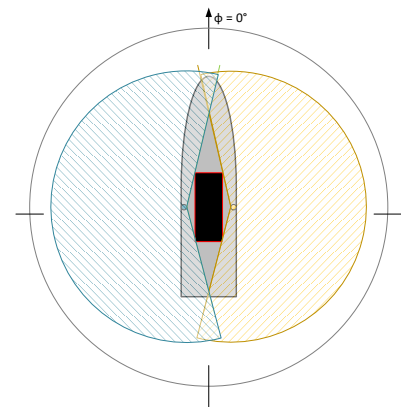




Technical Description

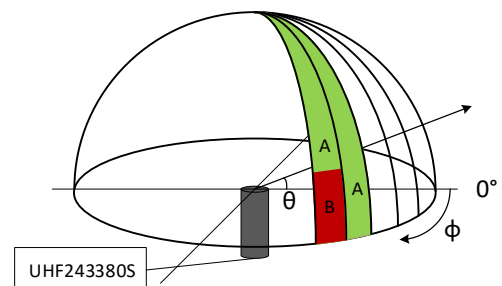
The MUOS & legacy TACSAT Antenna Selector is designed to allow one or two radios to maintain full hemispherical coverage using two antennas onboard a moving platform, where one of the antennas may have a blocked line-of-sight. The system monitors the ship heading and position in relation to the satellite position and automatically switches to maintain the best coverage.

- UHF TACSAT applications 243-380 MHz
- MUOS and UFO/DAMA compatible
- One or two radios
- Two antenna switching capability
- Interface to navigational system for heading and position
- Radio will automatically be switched to the antenna with the best coverage
- Remote control/operation
- LNA base option for Comrod UHF243380S antenna to reduce Rx RF system losses



Allowed sectors are defined in blue and yellow for the port and starboard mounted antennas.

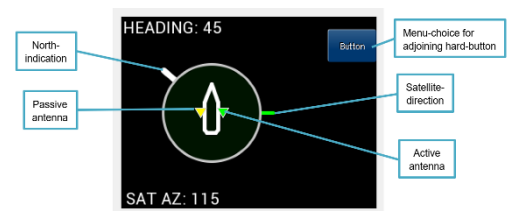
For each antenna, operational and blocked sectors can be defined, with two degrees resolution across the full 180 degree elevation sectors. Each sector can be defined as "Allowed" or "Blocked" as shown in the simplified illustration opposite.



Electrical specification

Frequency range	243-380 MHz 243-270/292-318 MHz (Legacy TACSAT) 320-320/360-380 MHz (MUOS)
VSWR	≤ 2:1
Nominal impedance	50 ohm
Power rating	50 W
Power Supply	24 VDC
Insertion Loss	< 1.5 dB, single connection < 5.5 dB, through combiner
Remote monitoring	Ethernet, IP or HTTP
Remote control (option)	SNMP or JSON

User Interface



- The current heading is displayed in the top-left corner.
- Direction of North is indicated relative to the vessel.
- Direction of satellite(s) indicated relative to the vessel.
- Currently used antenna is indicated for the vessel.

Electrical connections



- POWER Power 24 V DC 2 pin (MIL-DST-5015)
- CTRL IN Radio control interface 19 pol MIL (MIL-DST-5015) for the radio control interface (optional)
- POS IN NMEA 0183 interface 19 pol MIL (MIL-DST-5015) for the position data
- ETH2 Ethernet network connector RJ45
- ETH1 Ethernet network connector RJ45 (Used for Web-GUI access)
- RF IN 1 N connector for TRx 1 connection
- RF IN 2 N connector for TRx 2 connection
- RF OUT 1 N connector for Antenna 1
- RF OUT 2 N connector for Antenna 2

Mechanical specification

Dimensions housing	420 x 254 x 86mm
Dimensions overall	483 x 322 x 86mm
Weight	6 kg
Finish	Anodised aluminium
Temperature range	-55 °C, +71°C; -67 °F, +160 °F
Installation	Standard 19 inch rack mount
MIL Standards	MIL-STD-461F MIL-STD-810F MIL-STD-1472F MIL-HDBK-217F

