Portable MUOS Emulator

Hands-On Mission Training. Off-Satellite Operation.

The Mobile User Objective Orientation System or "**Mighty MUOOS**" is an off-satellite system emulator that prepares users and planners prior to MUOS radio use in the field. This local and portable solution for the MUOS system offers realistic and configurable training without the use of live satellite channels.

The Mighty MUOOS is perfectly suited for MUOS system validation, classroom education, pre-mission rehearsals and system checks. Using this dynamic technology, your organization can exercise various connectivity scenarios to develop TTPs and train personnel, while maintaining manageable logistics and reduced expenses.

MIGHTY MUOOS™

Product Highlights

- Portable and durable design
- Emulates MUOS system operation without using live satellite channels
- Supports up to 4 simultaneous call service legs and up to 30 concurrent netted users
- Capability to customize scenarios and create new ones

- Default scenarios included
- Self-contained and ready to use when connected to AC power, GPS Antenna, and MUOS terminals
- Base unit emulates a single MUOS satellite beam-carrier
- Optional second satellite beam carrier

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for more information

MIGHTY MUOOS™
Product Specifications

Supported Call Types:

- Point-to-Point (PtP)
- Point-to-Net (PtN)
- Netted Comms (Group)
- Multi-RAB (Summer CY '25)

Data Rates:

- 2.4 kbps
- 9.6 kbps
- 32 kbps
- 64 kbps

Operating Frequencies:

- 300-320 MHz (UHF) in the U2B direction (configurable)
- 360-380 MHz (UHF) in the B2U direction (configurable)
- Hardware supports MUOS Plan B frequencies

Control and Interface:

- Web based Graphical User Interface
- Local and Remote Access supported

Power:

- 120VAC

Dimensions:

- 26"W x 34"H x 36"D

Setup and Training:

- Remote setup support and training included

Warranty:

- 12 months

Options:

- Expansion module for added beam, enabling mobility testing
- Extended support

Case:

- Rugged shipping container
- Shock mounted electronic chassis
- Removable, stowaway front and rear covers
- Removable, lockable swivel casters
- Water resistant
- Grip handles

Inputs:

- GPS signal
- Model 1900-1
  - Up to 4 direct connected TX/RX terminals
  - Up to 4 direct connected TX-RX terminals
- Model 1900-2
  - Up to 4 direct connected TX/RX terminals

Notional Lab Diagram

The Mighty MUOOS' satellite and ground emulations are indistinguishable from actual MUOS system operations.

Ultra-realistic mission scenarios

UHF   Ka-Band