



DUS MOBILE ROC

MODULAR ROC BACKBONE FOR OFFICE, VESSEL AND FIELD DEPLOYMENT

The DUS Mobile Remote Operating Centre (ROC) is a modular, portable system for remote and autonomous USV operations across inland, coastal and offshore missions. Built around independent communication, power distribution, backup battery and transport modules, it can be deployed as a single portable tower or integrated into van and office rack systems. It connects seamless with external IT equipment and mission software. While monitoring, alerting and logging features support regulatory readiness and alignment with applicable operational requirements.



Mission continuity built in

Dual LTE/WAN, Wi-Fi and satellite links, plus backup battery power and automatic 230 VAC grid transfer, keep the ROC operational during outages and mobile deployments.



Flexible modular setup

Interchangeable, stackable modules support trolley transport, mission-specific setups, easy replacement and integration in vans, vessels and offices.



Secure multi-ROC resilience

Supports multi-ROC connections for secure redundant switching and takeover, with continuous monitoring, alerting and logging for safe, reliable and rapid recovery.



UNMANNED
SYSTEMS

SYSTEM OVERVIEW

The Mobile ROC system provides a resilient operational backbone for DEMCON's remote and autonomous USV ecosystem. Through native integration with DEMCON Uncrewed Mission Software (DUMS), it enables remote helm operations, mission planning, fleet monitoring and worldwide operations from a single operational environment. The ROC modules can be deployed as an integrated tower or incorporated into vehicle and office rack systems, supporting flexible deployment, easy replacement and scalability across different vessels, locations and mission. Developed in accordance with relevant DNV AROS guideline principles, the system supports IMO MASS-aligned concepts for BVLOS and over-the-horizon operations.

MOBILE ROC CONFIGURATION

A typical operational setup includes one or more ROC towers, internal and external antenna systems, and an operator workstation, with an optional multi-screen configurations depending on the mission profile and ROC location.

MINIMAL STANDARD CONFIGURATION

- **1x Communications Box** – communications, redundant network, internal antennas and external interfaces.
- **1x Power Distribution Box** – power distribution with automatic input switching.
- **1x Battery Backup Box** – backup power for operational continuity and safety.
- **1x Transport Trolley** – mobile frame for transport between vessel, quay, office, van, truck or trailer.

Operator laptops, workstations and IT peripherals can be supplied by the operator or included in the delivery.

TECHNICAL HIGHLIGHTS

- Dual LTE/WAN communications + Wi-Fi connectivity + optional external WAN and satellite communication
- VPN-based remote connectivity and secure data links
- Load balancing and failover support for resilient data connectivity
- Dual 230 VAC input with automatic transfer between grid connection and/or backup batteries
- Dedicated VAC and VDC outputs for communication and operator equipment
- System health monitoring, real-time alerting and logging
- Monitoring of temperature, humidity, electronic fuses and redundancy modules
- Expandable with additional communication, battery or utility modules



SOFTWARE INTEGRATION

The Mobile ROC interfaces with the DUMS remote helm application for full remote control, mission planning, situational awareness, vessel and ROC management. Integrated diagnostics provide real-time monitoring, alerting, local/cloud data logging and support efficient remote troubleshooting of ROC and vessel subsystems.

OPTIONS & EXTENSIONS

The Mobile ROC can be configured with additional communication-, power-, battery modules, complete second ROC setups and specific utility modules. Optional external antenna sets are available for high-gain vessel deployment, low-profile vehicle mounting or portable plug-and-play tripod use.

GET IN CONTACT

Interested in a mission-specific ROC configuration? For details, configuration options and integration support, contact us through e-mail or call us.

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