



## MOC Mk3



### General

The ever-increasing workload on naval combat operators requires consoles with excellent Human Computer Interaction (HCI) and task oriented information. Apart from comprehensible tactical information with adjustable settings, the physical ergonomics play an important role. Thales Nederland has collaborated with naval operators and the Human Factors section of the Netherlands Institute of Applied Scientific Research to optimise the design of the console.

The MOC Mk3 Product Line incorporates several customised console configurations. They meet a diversity of requirements related to:

- Integration of third party equipment;
- Display of third party software applications;
- Operator friendly and flexible HCI;
- High reliability;
- Diversity of operator roles and tasks;
- Position of the console in the Operations Room;
- Available space in the Operations Room;
- Available infrastructure on-board for power protection and cooling;

- Verbal and non-verbal communication with adjacent operators.

### Main characteristics

- Up to three 20.1" (21.3" optional) high resolution Liquid Crystal Displays (LCD) displays
- Various input devices (e.g. keyboard, joystick and protected keys);
- Display of radar video and two TV video windows;
- Design ergonomically optimised with end user;
- Multifunction console with log-in facility for every role;
- Recent technology with Commercial Off The Shelf (COTS) workstation;
- Flexible interface with ship for cooling (water/air) and mounting (with/without subframe and suspension);
- Space saving through efficient and flexible footprints, as well as local / remote packaging;
- Integration of third party equipment, accommodated through Inter Console Units (ICU);
- Easy technology upgrade through open hardware architecture;
- Supports reduced manning with easy cleaning, and maintainability;
- Anti Repetitive Strain Injury (RSI) measures.



## MOC Mk3

# Multifunction Operator Console Mk3

### Dimensions and Mass

	Width (mm)	Height (mm)	Depth (mm)	Mass (kg)
Single head	800	1150	1220	160
Dual head horizontal	1130	1150	1220	250
Dual head vertical	800	1600	1220	230
Triple head horizontal	1690	1150	1220	350

Versions with remote packaging depth 950 mm instead of 1220 mm

### Power Requirements

- Single phase, 115 V 60 Hz or 230 V 50 Hz, < 1100 W
- < 80 W Anti condensation power in case of air cooling
- Mil Std 1399, STANAG 1008 ed. 8
- Compliant to CE guideline
- Uninterruptable Power Supply with typical 10 minutes capacity

### Environmental Conditions

- Noise level: < 49 dB(A)
- Vibration: Mil Std 167-I
- Temperature operational: 0-45°C water cooled version, 5-35°C Air cooled
- Humidity: 0-95% (non condensing) in case of water cooling. 20-80% for air cooled version
- Shock: 80 g, 8.3 ms half sine pulse
- EMI: Mil Std 461D tailored
- Safety: CE (EN 60950) and Mil HDBK 454
- Drip water: Mil Std 810 E 15 degrees
- Reliability: MTBCF>4000 hours



MOC Mk3 single head MOC Mk3 dual head vertical



MOC Mk3 dual head right



MOC Mk3 dual head left



MOC Mk3 triple head