DuraVision **MDF2701W**

Product Website

27" monitor for shipping

On ships and offshore installations, monitors must be easy to read and reliable in the dark and in daylight. The DuraVision MDF2701W is equipped with optical bonding to ensure optimum visibility and robustness in maritime environments. It also offers a wide dimming range between 0.05 and 350 cd/m². The LCD backlight, gamma and RGB color settings of the 27" Full HD screen are factory calibrated to achieve the accurate color reproduction required for ECDIS. The monitor is certified according to the international standards IEC 61174, IEC 6288 and IEC 62388 for ECDIS and radar applications. It is suitable for use in maritime applications and complies with the international standard IEC 60945 for maritime navigation and radiocommunication equipment and systems in terms of temperature, humidity and vibration. Although fanless, it can be installed and operated in different orientations. The panel-mount structure also allows front screw mounting for convenient installation on consoles and in existing systems.

- Robustness and clear vision thanks to optical bonding
- Wide dimming range for required brightness levels during the day, at night and in fog
- Calibrated color rendering for ECDIS
- Redundant power supply: AC and DC
- Reliable and durable thanks to fanless operation and sophisticated heat dissipation
- Tested for ECDIS and radar in accordance with IEC61174, IEC 62288 and IEC 61174
- 24/7 use, 3-year warranty

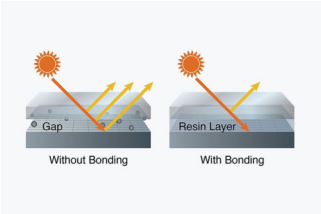
Image quality
Precise, high-contrast, bright and crisp screen

Optical Bonding

In ships and offshore structures, monitors need to be sunlight readable and reliable. The DuraVision MDF2701W is equipped with optical bonding for increased visibility and durability in maritime environments. Optical bonding is a process in which a layer of resin fills the gap between the LCD module and the cover glass of the monitor. This results in increased light transmission from the monitor's backlight and reduced screen reflection caused by ambient lighting for exceptional visibility. Optical bonding also prevents condensation that causes conventional screens to become foggy in environments with extreme temperature fluctuations. The optical bonding process is carried out in-house at EIZO's own facilities to ensure high quality production.

With optical bonding, the screen maintains a high level of visibility compared to a monitor without bonding, even if it has higher brightness. According to EIZO's in-house testing, it would require a monitor without optical bonding to have 1160 cd/m^2 brightness to be comparable in clarity as the DuraVision MDF2701W with bonding, which achieves high clarity at 350 cd/m^2.

Learn more about optical bonding



Optical bonding reduces the reflection of ambient light and significantly increases visibility.

Left: Without Optical Bonding, 500 cd/m2 (with protective glass) / Right: With Optical Bonding, 350cd/m2 (with protective glass)

Calibrated for ECDIS

Backlight brightness, gamma, and RGB color settings are calibrated at the factory so the monitor achieves accurate color reproduction for meeting the highly specialized requirements of ECDIS systems. The monitor meets IEC 61174, IEC 62288, and IEC 62388 international standards for ECDIS systems and radar applications.

ECDIS indicator

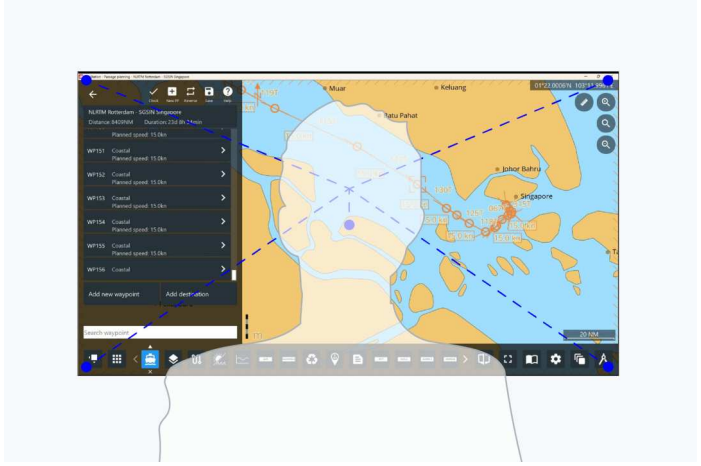
The ECDIS indicator located on the front of the monitor is lit when the brightness and color settings correctly meet the requirements for ECDIS. In the event the monitor's settings are adjusted such that the brightness is no longer supporting ECDIS standards, the light will automatically turn off.

Large dimming range for changing light conditions

Suitable for day and night operation: Thanks to the wide dimming range from less than 1 cd/m^2 to 350 cd/m^2, the monitor is ideally suited to changing light conditions. This means that the brightness of the monitor can be optimally configured for all ambient lighting and can be used without problems even in dark rooms.

High contrast and color accuracy from all angles of view

The VA panel with wide viewing angle ensures that the contrast hardly falls when viewing the screen from any angle and there are only minimal differences in color. This means that exact color rendering and clear images can be achieved even in the corners of the screen.



FOR THE SAKE OF THE EYES

Flicker free

The monitor is flicker-free at every brightness setting. This is great for users, as their eyes will not tire as quickly, allowing them to work in front of the screen for longer periods of time without fatigue.

ANTI-GLARE COATING

More image, less reflection

The surface of the screen has an anti-reflective (AR) coating to reduce the reflection of ambient light on the screen. It also has an anti-fingerprint coating (AF) to minimize residues that occur when touching the screen.

Easy installation
Maintenance-free operation

One monitor, many ports

The monitor is equipped with DisplayPort™, DVI-D and D-Sub inputs and also has USB- B and RS-232C interfaces for communication and control.

Free positioning

The monitor can be installed and operated horizontally or tilted downwards by up to 30° without affecting performance. This allows it to be mounted flexibly, even in positions above eye level.

Low power consumption

The monitor consumes a maximum of just 45 W. This is less than half compared to conventional solutions.

Fan-less solution with low heat output

EIZO designed the monitor to prevent heat buildup, negating the need for fans, by implementing a unique, low power consumption design and using cutting-edge thermo-fluid analysis. Proper heat management eliminates the risk of hardware failure or deterioration of internal components due to external air intake from fans, ensuring that the monitor can be used reliably for a long time.

Slim Design and Light Weight

The thin sheet metal used for the monitor's housing and the fanless design allow for a slimmer and lighter weight monitor compared to other products in the same size class. This helps to streamline installation.

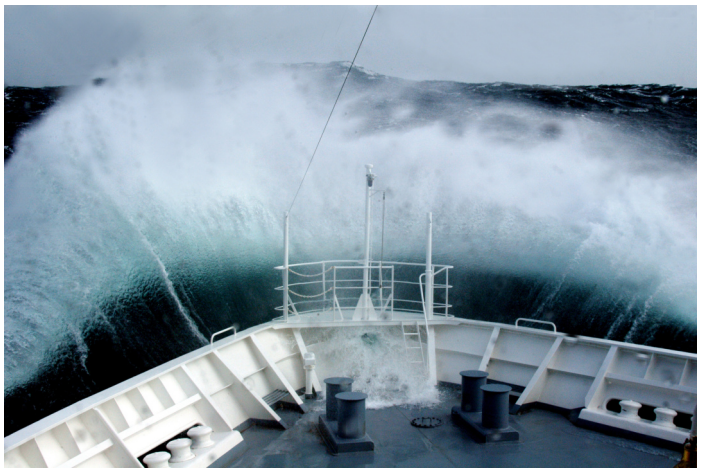
Installation to Consoles

Designed to be installed in maritime consoles and existing systems, the monitor's panel mount structure allows it to be screwed on from the front. The DuraVision MDF2701W's mounting holes match those of EIZO's 25.5-inch DuraVision FDU2603W maritime monitor, making it a safe replacement if a system refresh is needed.

Durability
And reliability

Reliable on the high seas

Heat, cold, vibration – the monitor is able to withstand the permanent strains of the maritime environment. It fulfills the IEC 60945 device standard for the fields of the environment and electromagnetic compatibility required for the licensing of maritime equipment. It also boasts an IP65 rating, and is even protected against dust and hose water getting into it. Other properties: A special coating protects the electronics from moisture.



Maritime Classifications

The monitor is approved and certified by major maritime classifications, such as DNV (Germany / Norway), LR (UK), ABS (USA), NK (Japan), and EU RO MR to meet IMO (International Maritime Organization) regulations.

Redundancy in power supply

Multiple power inputs allow you to power the monitor using either a DC or AC connection, or both in parallel for redundancy.

Three-year warranty

EIZO grants a three-year warranty. This is possible thanks to the highly developed production process based on a simple principle of success: sophisticated and innovative technology, made from high-end materials.

24/7 use

The MDF2701W is built for 24-hour use and is characterised by maximum reliability.

Sustainability
Environmentally and socially conscious production

Sustainable and durable

The MDF2701W is designed to have a long service life and normally outlasts the warranty period by some distance. Replacement parts are available many years after production has ceased. The entire lifecycle takes into account the impact on the environment as the longevity of the product and the fact it can be repaired saves resources and protects the environment. When designing the MDF2701W, we took a minimalistic approach to our resources by using high-quality components and materials, as well as a careful production process.

Environmentally conscious use of materials

The monitor's material composition includes recycled plastic to help reuse resources and protect the environment and oceans.

Socially responsible production

The MDF2701W is produced in a socially responsible way. It is free of child labour and forced labour. Suppliers along the supply chain have been carefully selected and they have also committed themselves to produce in a socially responsible way. This applies in particular to conflict minerals. We present a detailed report about our social responsibility annually and voluntarily.

Environmentally conscious production

Each MDF2701W is manufactured in our own factory, which implements an environmental and energy management system in accordance with ISO 14001 und ISO 50001. This includes measures to reduce waste, wastewater and emissions, resource and energy consumption, as well as to encourage environmentally conscious behavior among employees. We publicly report on these measures on an annual basis.

Technical Data

GENERAL

Item no.	MDF2701W-BK
Case color	Black
Areas of application	Industry
Product line	DuraVision
Areas of application	Maritime
EAN	4995047066378

SCREEN

Screen size [in inches]	27
Screen size [in cm]	68,6
Format	16:9
Viewable image size (width x height) [in mm]	597,6 x 336,2
Ideal and recommended resolution	1920 x 1080 (Full HD)
Pixel pitch [in mm]	0,311 x 0,311
Supported resolutions	1920 x 1080 (Full HD)
Panel technology	VA
Max. viewing angle horizontal [in °]	178
Max. viewing angle vertical [in °]	178
Number of colors or greyscale	16.7 million colors (D-Sub, 8 Bit), 16.7 million colors (DVI, 8 Bit), 16.7 million colors (DisplayPort, 8 Bit)
Max. brightness (typical) [in cd/m²]	350
Max. dark room contrast (typical)	3000:1
Response time black/white/black change (typical)	12
Backlight	LED

FEATURES & OPERATION

Preset color/greyscale modes	1x manual memory location, Day, Night, Dusk
24/7 operation	✓
Automatic signal input recognition	✓
On-screen menu languages	zh, jp, de, en, fr, es, it, se
Adjustment options	Signal information, Color Mode, Brightness, Contrast, Color temperature/White point, Gamma, Colour tone, Color saturation, Scaling, Alignment, Image position, Backlight Off Mode, ECDIS Indicator, Power Indicator, Monitor reset, OSD language, Signal input, Key lock
Integrated power unit	✓

DIMENSIONS & WEIGHT

Dimensions (without stand) (width x height x depth) [in mm]	656 x 454 x 62,5
Weight (without stand) [in kg]	8.6
Dimension drawing (PDF)	Dimension drawing (PDF)

CONNECTIONS

Signal inputs	DisplayPort (HDCP 1.3), DVI-D (HDCP 1.4), D-Sub
USB specification	USB 2
USB upstream ports	1 x type B
Graphic signal	DVI Single Link (TMDS), RGB Analog, DisplayPort
Control port	DDC/CI, RS-232C, USB-Protocol
Sync formats	Separate

ELECTRICAL DATA

Frequency	DisplayPort: 31-76 kHz/59-61 Hz; DVI-D: 31-76 kHz/59-61 Hz; D-Sub: 31-81 kHz/56-76 Hz
Maximum Power Consumption [in watts]	44 (DC) / 45 (AC)
Power supply	AC 100-240 V, 50/60 Hz; DC 24 V
Power Management	✓

CERTIFICATION & STANDARDS

IP rating/protection class	IP65 (rear IP22)
Operating temperature	-15 - 55 °C / 10 - 93 % (R.H., non condensing)
Compass Safe Distance	Standard compass: 0,8 m, Steering compass: 0,55 m
Certification	Ship Classification: DNV (Norway / Germany), NK (Japan), LR (UK), ABS (USA), CE, UKCA, CB, RoHS, WEEE, EU RO MR, IEC60945, IEC61174, IEC62288, IEC62388

SOFTWARE & ACCESSORIES

Other box contents	Quick guide

WARRANTY

Warranty periode	3 years

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