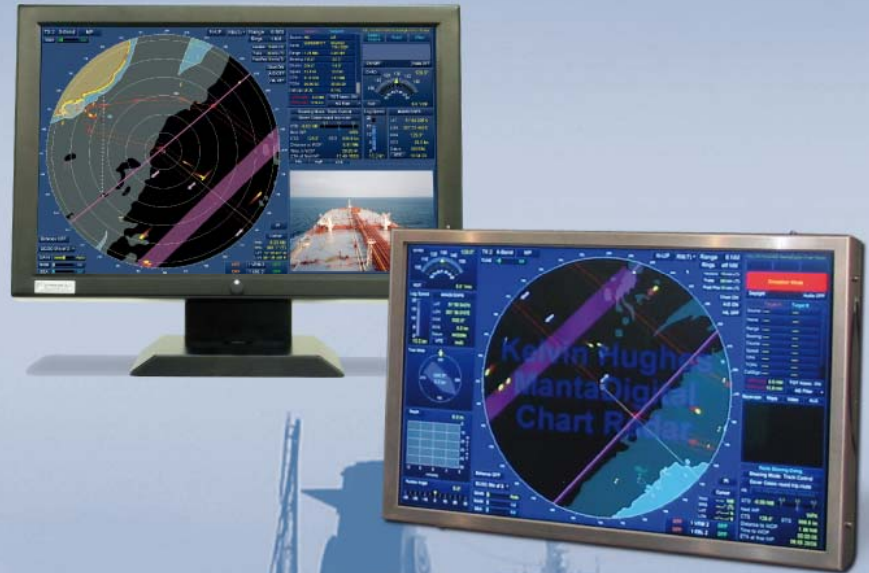



SHIP DISPLAYS



- Designed for maritime environment and ECDIS, Radar, Ship Control applications
- 16:10 widescreen format
- Laminated safety glass with high efficiency anti-glare treatment
- Robust seawater resistant aluminium housing treated to protect from corrosion
- Wide dimming range backlight inverter
- Extended temperature range - climate control and display heating
- Enhanced vibration and shock resistance
- cTEC features guarantee trouble-free operation, prolong lifetime and reduce the cost of ownership
- Long-term service and support

| Diagonal Model |  | 22" 6022 SD MTM | 26" 6026 SD MTM |
|---|---|--|--|
| Display | | | |
| Panel type: | LCD/TFT | LCD/TFT | LCD/TFT |
| Size / diagonal: | 22" / 56cm | 26" / 66cm | 26" / 66cm |
| Active screen dimensions (horizontal x vertical): | 474 x 296mm | 550 x 344mm | 550 x 344mm |
| Resolution (pixel) / Format: | Multiscan up to 1680 x 1050 / 16:10 | Multiscan up to 1920 x 1200 / 16:10 | Multiscan up to 1920 x 1200 / 16:10 |
| Brightness (typical): | 300 cd/m ² | 400 cd/m ² | 400 cd/m ² |
| Dimming range: | > 2000:1 | > 2000:1 | > 2000:1 |
| Contrast ratio (typical): | 1000:1 | 1000:1 | 1000:1 |
| Number of colours: | 16,7 Mio | 16,7 Mio | 16,7 Mio |
| Viewing angle (horizontal and vertical): | 178° | 178° | 178° |
| Interface Board | | | |
| Frequency (Horizontal/Vertical): | 30 – 80 kHz / 50 – 85 Hz | 30 – 80 kHz / 50 – 85 Hz | 30 – 80 kHz / 50 – 85 Hz |
| Synchronization: | Sync on green, composite sync with auto detect, separate H- and V-sync | Sync on green, composite sync with auto detect, separate H- and V-sync | Sync on green, composite sync with auto detect, separate H- and V-sync |
| Inputs: | | | |
| PC analog: | • | • | • |
| PC digital: | • | • | • |
| Y/C: | • | • | • |
| S-Video: | • | • | • |
| RS232: | • | • | • |
| Controls: | | | |
| Keys: | • | • | • |
| Potentiometer control for dimming (cabinet and rack versions only): | • | • | • |
| Serial Interface: | • | • | • |
| PiP: | • | • | • |
| Environmental Conditions | | | |
| Temperature (operating / non-operating): | -15°C - +55°C / -20°C - +60°C | -15°C - +55°C / -20°C - +60°C | -15°C - +55°C / -20°C - +60°C |
| Vibration: | 5Hz – 12Hz ± 1.6mm, 12.5Hz – 25Hz ± 0.38mm, 25Hz – 50Hz ± 0.1mm | 5Hz – 12Hz ± 1.6mm, 12.5Hz – 25Hz ± 0.38mm, 25Hz – 50Hz ± 0.1mm | 5Hz – 12Hz ± 1.6mm, 12.5Hz – 25Hz ± 0.38mm, 25Hz – 50Hz ± 0.1mm |
| Shock: | 10g, 11ms | 10g, 11ms | 10g, 11ms |
| Power | | | |
| Power supply: | 85 - 264V AC | 85 - 264V AC | 85 - 264V AC |
| Power consumption: | < 100W | < 150W | < 150W |
| Lockable power input: | • | • | • |
| Additional socket for lockable power output: | On request | On request | On request |
| Approvals | | | |
| EMI/EMC : | EN55022 class A, EN55024, EN60945 | EN55022 class A, EN55024, EN60945 | EN55022 class A, EN55024, EN60945 |
| Safety: | EN60950, EN60945, CE | EN60950, EN60945, CE | EN60950, EN60945, CE |
| Vibration: | EN60945 | EN60945 | EN60945 |
| Shipcontrol: * Approvals in process / ** Built to meet | IEC 62288, EN61174 (ECDIS), EN60945 (Navigation), IEC 62388 (Radar) | IEC 62288, EN61174 (ECDIS), EN60945 (Navigation), IEC 62388 (Radar) | IEC 62288, EN61174 (ECDIS), EN60945 (Navigation), IEC 62388 (Radar) |
| Supplied Accessories | | | |
| Video cable: | VGA | VGA | VGA |
| Power cable , operating manual (D/E): | • | • | • |
| Versions | | | |
| Cabinet: | • | • | • |
| Rack: | On request | On request | On request |
| Chassis-only: | • | • | • |
| Dimensions (H x W x D) | | | |
| Cabinet version: | On request | 417.8 x 624.1 x 124.9 mm | 417.8 x 624.1 x 124.9 mm |
| Rack version: | On request | On request | On request |
| Chassis-only version: | 328.4 x 502 x 100 mm | 384.4 x 590.8 x 111 mm | 384.4 x 590.8 x 111 mm |
| Colour | | | |
| Standard colour cabinet/front panel: | RAL 9005 | RAL 9005 | RAL 9005 |
| Options* | | | |
| * Please note: Not all options may be combined. | | | |
| Desk Stand for cabinet version: | • | • | • |
| Bracket for rack version: | ○ | ○ | ○ |
| DVI cable: | • | • | • |
| Customised colour: | • | • | • |
| 24V DC power supply operating from 18V to 32V: | • | • | • |
| ALC (Ambient Light Control): | • | • | • |

Description & Special Features

wideECDIS® MultiTask Monitors - LCD/TFT Displays / 16:10 Format

CONRAC's range of highly engineered Marine Grade LCD/TFT Displays is specifically designed to withstand the harsh maritime environment. The SD-Series (Ship Display-Series) meets the stringent demands of the international standards for Maritime Navigation and Radio Communications Equipment & Systems and ECDIS (Electronic Chart Display Information System).

Used for ECDIS, Radar, ARPA (Automatic Radar Plotting Aid) or ship control, the displays' superior performance provides very clear and readable images regardless of the ambient light conditions.

With the highly innovative wideECDIS® series of MultiTask Monitors, CONRAC introduces an entirely new generation of wide screen Radar and ECDIS displays. The new 16:10 widescreen format allows to dramatically increase the amount of information displayed which is important for compliance with the new Radar standard. The superior picture performance of the wideECDIS® monitors is achieved with high performance full HD (High Definition) panels in combination with CONRAC's latest state-of-the-art electronics.

Customised displays are available on request.

Features

Wide Dimming Range

During night-time operations in bridge and wheelhouse environments it is vital to optimise the display brightness to the ambient light conditions for night vision capability. CONRAC offers fully dimmable displays.

Contrast enhancing safety glass

The use of laminated safety glass with high efficiency anti-glare treatment does not only maximise security and protect the display but also enhances image contrast.

Special operating concept

CONRAC's COS (Customised Operation System) allows adjustment of brightness alternatively using the traditional potentiometer control, hot keys or the integrated intelligent ALC (Ambient Light Control).

Approvals

Approved/built to meet IEC 62288 as well as IEC 61174 (ECDIS), EN 62388 (Radar), EN 60945 (Navigation), CONRAC Ship Displays are the ideal solution for the use in Integrated Bridge Systems.

Extended temperature range

Climate control and display heating for highly reliable operation under extreme temperatures.

Corrosion protection

Robust seawater resistant aluminium housing treated to protect from corrosion.

Shock and vibration resistance

Enhanced shock and vibration resilience ensures stable operation and long lifetime under critical ambient conditions.

eTEC - CONRAC Technology

Perfect image performance by day & by night.

The use for ECDIS, radar and navigation makes high demands on the displays in integrated bridge systems. Displays, being a critical aspect of safe and efficient operations, have to meet stringent quality standards and regulations.

Especially an infinitely variable dimming required for night vision is a challenge. As a result of extensive R&D, decades of direct experience in the field and very close cooperation with key suppliers, CONRAC has implemented vital functions into their Ship Display Series to guarantee superior performance, both, during day and night operation.

eHBL

Homogeneous Brightness Level

Dimming of standard TFT widescreen displays does result in uneven brightness performance. Especially during night operation this effect is distracting and unacceptable for navigation equipment. CONRAC developed a special panel enhancement feature which guarantees an even brightness level over the entire screen.

eDBI

Dynamic Backlight Inverter

Due to the high photosensitivity of the human eye in darkness it is evident that the brightness set-up needs to be adjusted accordingly. Standard dimming does not allow continuously adjustable brightness. CONRAC realizes this requirement with its dynamic logarithm backlight inverter.

This component enables the adjustment of even the smallest brightness nuances for night time application and avoids the annoying dazzling effect of standard screens.

eHCD

High Contrast Dimming

Standard dimming does not only reduce the brightness of the panel, it also reduces the contrast. As a consequence, the image shows a reduced contrast level and colour deviations in dimmed mode. To avoid this negative effect, CONRAC implemented high contrast dimming functions, allowing dimming at the full contrast level guaranteeing outstanding picture performance during night time operation.

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