



ALPHATRON
Marine



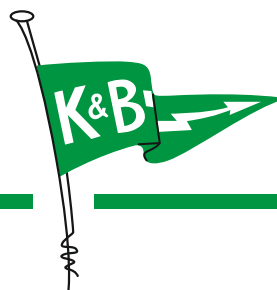
AlphaLine Repeater

A new generation of displays

Kadlec & Brödlin GmbH

SCHIFFSELEKTRIK
ELEKTRONIK
NAVIGATION
KOMMUNIKATION

ELECTRIC
MARINE BUILDING
and
ENGINEERING

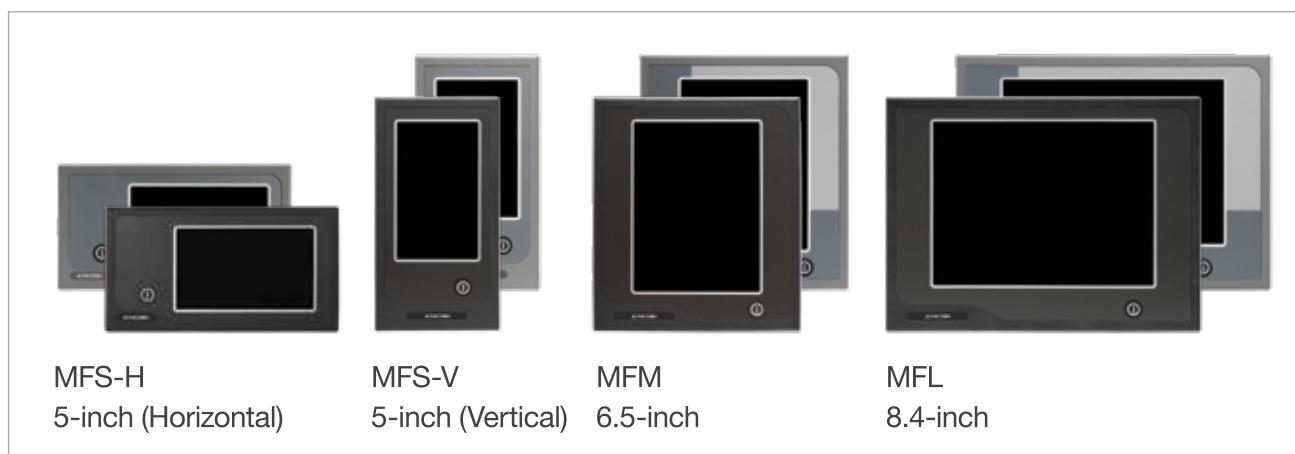


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A new standard

Smart, clear, consistent, safe, just some of the ways to describe what the AlphaLine Repeater Display series of navigation and communication instruments bring to the bridge of the future. A full lineup instruments that are easy to operate via a transparent color touchscreen display, which is available in three standard sizes and two colors that form a well-aligned complete whole. A software-driven instrument line that will meet the requirements of information displays for use in the marine and offshore sector.



Day, dusk, night and more

All our instruments feature dim backlighting from 0 to 100% from a central dimming system and have a theme-option available from the menu. This theme-option has three backlight presets where contrast and color are set in a fixed value and can be easily adjusted to day, dusk and night.



Within these presets, a customer is able to do manual dimming with small increments.

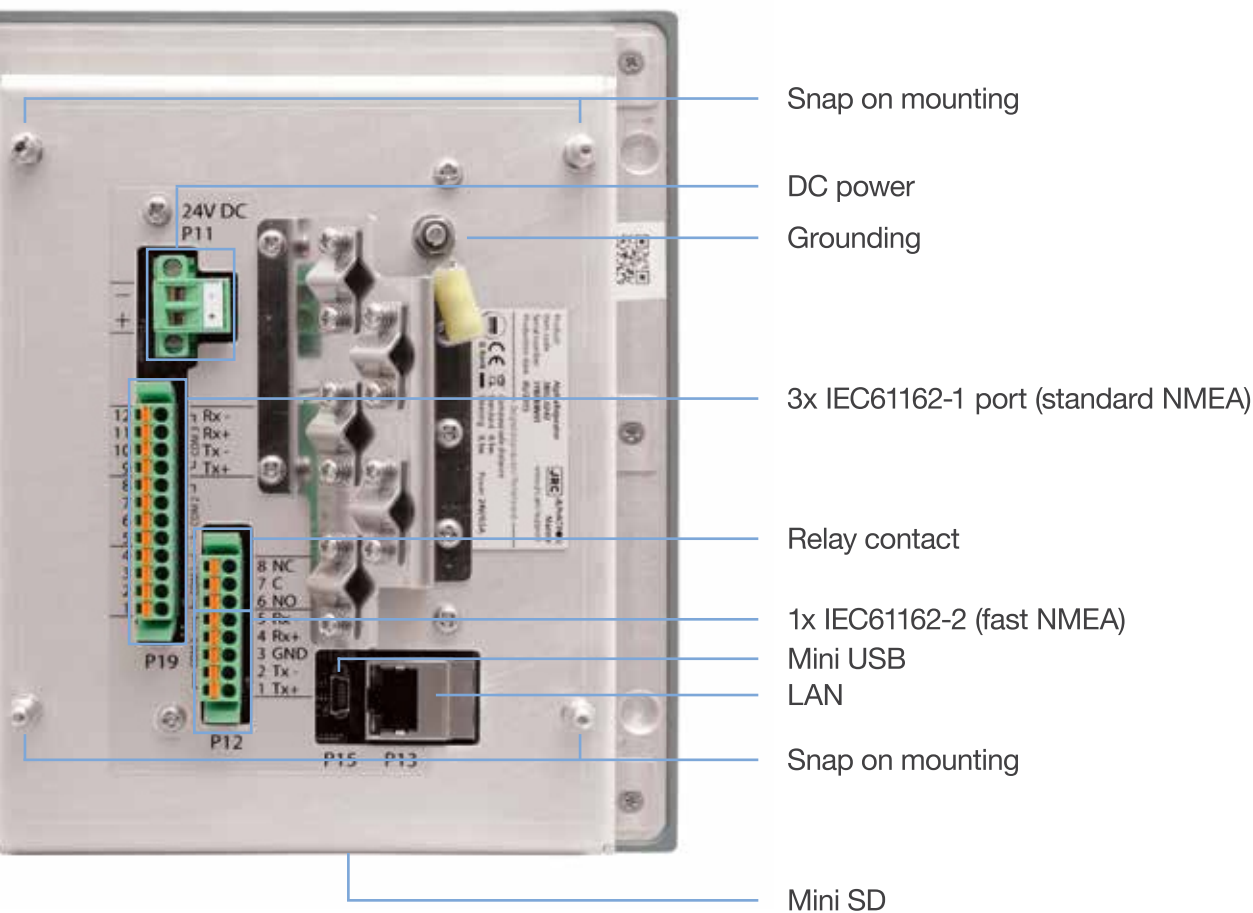
Desktop and ceiling mounting

Naturally desktop or ceiling mounting for all four display sizes is optionally possible using a ruggedized and watertight (ABS) bracket.



Extensive interfacing

Regardless of display size each display has standard a wide range of data input and output. It features a LAN interface and four NMEA ports. All data ports are galvanically isolated, full duplex and supporting signals according to the NMEA standard. Also Modbus for serial communication with industrial controllers such as Programmable Logic Controllers (PLC's) are supported. Next to this, all products are provided with a relay with normal open and closed contacts, a mini-USB port for connecting a trackpad and a mini-SD card port for software updates or maintenance. MF displays variants do not contain moving parts and feature a static cooling system.







Type approved

All AlphaLine Repeater displays and accessories are designed for the industrial environment found on board of ships with respect to physical as well as electrical environment, and as such have been separately certified and comply with the marine IEC60945 and latest DNV 2.4 standard. By meeting these rigorous test standards we can ensure years of problem free operation.



Display sizes

The most suitable arrangement of instruments and screen sizes can be selected for every type of ship. Depending on the application or information required, the software can be installed for merchant and inland shipping.

				
Product	MFS-H	MFS-V	MFM	MFL
AlphaHeading	v	v	Ⓟ	Ⓟ
AlphaHeading+				Ⓟ
AlphaTMC		○		
AlphaTMC+		○		
AlphaDepth	v	v	v v	
AlphaDepth Single			v	
AlphaSpeed	v	v v	v	
AlphaSpeedLog			v	v
AlphaTime	v	v	v	v
AlphaRudder		v	Ⓟ v	
AlphaTurn			Ⓟ v	v
AlphaTurn (optional rudder)			□	□
AlphaRudderTurn			v	v
AlphaWind			v	v
AlphaWind (relative)		v	v v	
AlphaMeteo			v	v
AlphaMeteo (relative)			v v	
AlphaNav				v

v Repeater

v Repeater River

○ IMO approved indicator

□ CCR-ZKR approved indicator

The AlphaLine Repeater displays have all software versions of different instruments built in and at the time of installation a particular function can be selected. However, the AlphaLine "indicator" displays have dedicated software for a particular application which cannot be changed and is as such certified and MED approved as part of a complete system.

Discover the software versions. On a single hardware platform.



Heading

Shows the ship's heading information from a standard ship's compass.



Heading+

Shows the ship's heading and an analog scale in tenths of degrees.



Speed (River)

Shows the ship's speed in km/h (either from single GPS antenna or speed log).



Nav

Shows the ship's speed, heading and depth info.



Depth Single

Shows, similar to the sea version, single depth information.



Depth (River)

Shows two depth readings simultaneously from both transducers installed.



Rudder (River)

Shows the rudder angle (with needle down) is if required expandable with a rudder feedback unit.



Turn (River)

Shows the ship's Rate of Turn (ROT) mandatory for all inland vessels, which have also installed a river radar.



RudderTurn

Shows the Rudder and Rate of Turn (ROT) on a single screen, particularly useful while maneuvering.



Time

Shows the actual date and time, can also be connected to GPS for time synchronization.



Wind (River)

Shows the relative wind info received from compatible wind sensor.



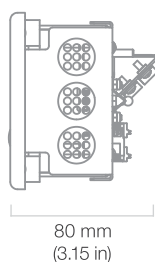
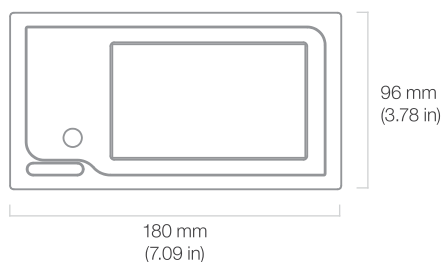
Meteo (River)

Shows relative wind and meteo info such as atmospheric pressure and temperature.

Tech Specs

AlphaLine MFS-H

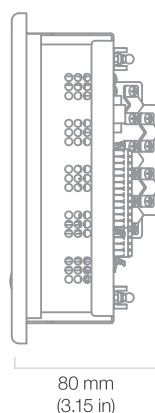
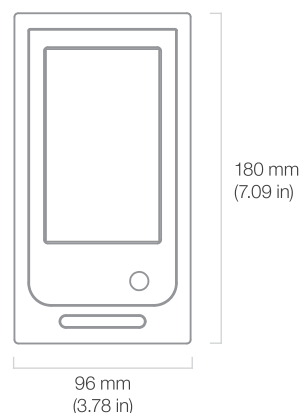
3803.0226 (grey), 3803.0228 (black) Weight 0.75 kg (1.65 lbs)



5-inch touch display
800-by-480-pixel resolution
Horizontal orientation
450 cd/m2 max brightness
View angle (H/V) 170°
Panel cutout 160x90 mm

AlphaLine MFS-V

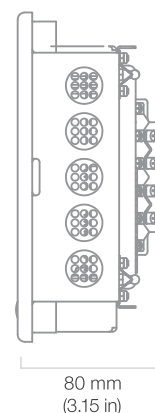
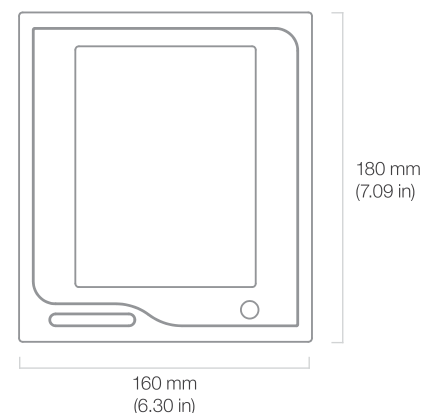
3803.0230 (grey), 3803.0232 (black) Weight 0.75 kg (1.65 lbs)



5-inch touch display
480-by-800-pixel resolution
Vertical orientation
450 cd/m2 max brightness
View angle (H/V) 170°
Panel cutout 90x160 mm

AlphaLine MFM

3803.0242 (grey), 3803.0244 (black) Weight 1.23 kg (2.71 lbs)

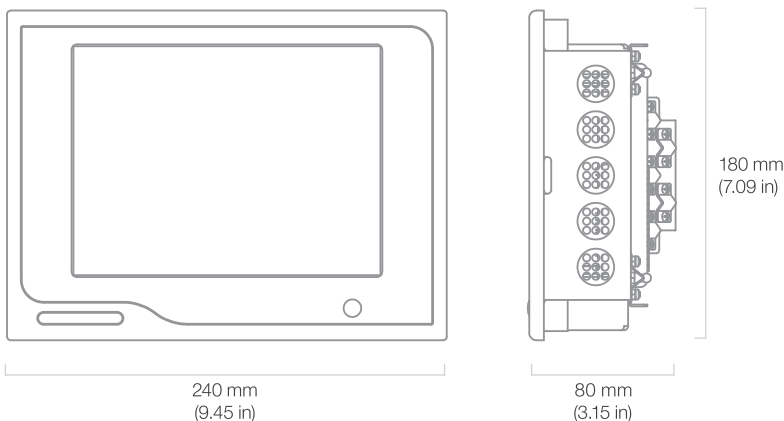


6.5-inch touch display
480-by-640-pixel resolution
Vertical orientation
450 cd/m2 max brightness
View angle (H/V) 140°/160°
Panel cutout 138 x 172 mm

Tech Specs

AlphaLine MFL

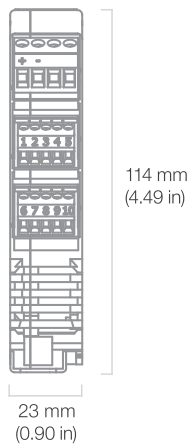
3803.0246 (grey), 3803.0248 (black) Weight 1.83 kg (4.04 lbs)



- 8.4-inch touch display
- 800-by-600-pixel resolution
- Horizontal orientation
- 450 cd/m2 max brightness
- View angle (H/V) 170°
- Panel cutout 216x172 mm

Analog interface Mk2

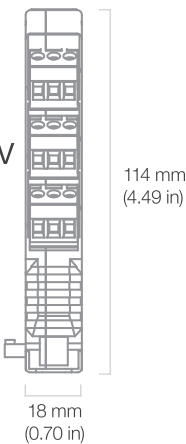
3109.0192 Weight 0.14 kg (0.31 lbs)



- IEC61162-1 serial port
- IEC61162-2 serial port
- Input 2x 0-20mA, +/- 5/10/20V
- Potentiometer input
- Outputs to:
 - NMEA/MODBUS
 - DIN rail installation

NMEA distribution module Mk2

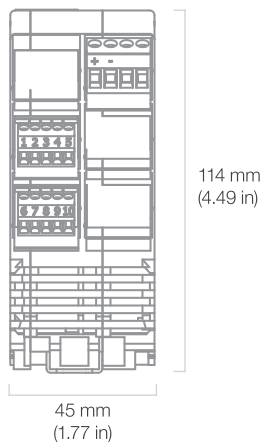
3401.0240 Weight 0.12 kg (0.26 lbs)



- IEC61162-1 serial port
- 1 input
- 4 outputs
- BUSBAR connection
- Master/slave/standalone
- Isolates listeners
- DIN rail installation

AlphaTurn interface Mk2

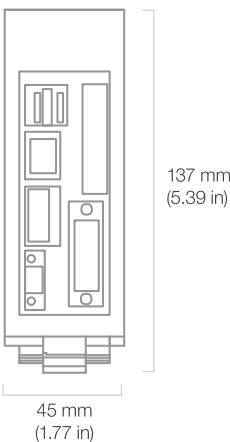
3108.0100 Weight 0.25 kg (0.55 lbs)



- IEC61162-1 serial port
- IEC61162-2 serial port
- Outputs to:
 - NMEA/MODBUS
- Communicates with:
 - ROT sensor/Autopilot
- DIN rail installation

AlphaRemote control interface

3402.0292 Weight 0.30 kg (0.66 lbs)



- Connection to PC or JRC MFD
- IEC61162-1 serial port
- Audio output
- IEC61162-450 ethernet port
- Relay contact
- Mini-USB connection
- DIN rail installation

www.jrc.am

Centers of Excellence
Houston, Rotterdam, Singapore, Tokyo

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