

MRS Marine

Smart Electronic Solutions for your Boat



About MRS Marine

Based in Split, Croatia — a city renowned for its rich heritage and as a hub for the yacht and boat industry — MRS Electronic has established its expertise center for smart marine electronics. The company boasts comprehensive in-house electronics and software development, along with complete manufacturing capabilities at its facility in Germany.

MRS Marine supports yacht and boat manufacturers, OEMs, and operators by providing advanced control systems that feature smart diagnostics for a more convenient boating experience. Additionally, MRS Marine ensures that clients are fully supported by our expert team, offering extensive consultation and customization services, including on-site assistance as required.



Controllers



Connected Controllers

Our connected controllers are used to expand existing CAN systems but can also be used as stand-alone head unit. Programming is done with the graphical software tool Developers Studio or Applics Studio or with C-Code.



PLC Controllers

PLC controllers are programmable logic controllers. The modules do not have a CAN- or LIN-Bus interface, but therefore have additional pins available for further functions. The same requirement profile can thus be realized with a more compact design.

Gateways

As a central point for all control units, gateways provide high performance in the filtering and routing of data and information. MRS-Gateways are used in the marine sector to control, coordinate and

communicate to all control units in the boat.

The modules are characterized by error-free and secure communication. Gateways are suitable to fulfill cybersecurity requirements and protect boats from unauthorized access and manipulation.



Smart and parametrizable Relays

Solid State Relay

Maintenance free relays for load currents of up to 25 A. Positive or negative signal and high capacitive and inductive currents.

Pulse Relay

Switch consumers of up to 20 A on for a predefined time. Potential free/VCC output and positive or negative control.

Time Relays

Switch consumers of up to 70 A on or off after a predefined time. Potential free/VCC output and positive or negative control.

Toggle Relays

Switch consumers of up to 20 A on and off with a single push button. Potential free/VCC output and positive or negative control

Voltage Monitors

Switch consumers of up to 15 A when the voltage exceeds or falls below a predefined threshold voltage.

Frequency Monitors

Switch consumers of up to 15 A on or off when a predefined frequency threshold is exceeded or not reached.

Flashers

For directional and warning flashing light applications. A blink frequency of up to 120 pulses per minute is supported.

DC/DC Converters

Provides two stabilized reference voltages for your applications. which can be used e.g. to supply sensors.



Make any relay watertight with our sockets



IP rating up to IP6K8



9-32 V



Operating Voltage Parametrizable with MRS Realizer

Multifunctional HMI-Displays

MConn

7", 10.1", 12.3"

MConn is a very powerful and flexible HMI, featuring a 32-bit quad-core ARM Cortex A9 processor with 2D, 3D, and vector graphics hardware acceleration. It is available in different screen sizes and offers four digital outputs, 18 multifunctional inputs, two CAN and one LIN interface. It comes with Ethernet, Wi-Fi, GPS as well as BLE connectivity and offers two optional USB 2.0 Type A ports. Microphone, audio-in and four analog video interfaces are optional.

TConn

4.3", 7"

The TConn is a cost-efficient CAN-Bus display with IP67 protection featuring a 4.3 or 7 inch screen with up to 850 nits brightness. The screen is optically bonded for optimal readability even in direct sunlight. An i.MX6 processor with 528 MHz, 2 GB memory, and 256 MB RAM ensures all-time reliable performance.

MConn Mini

2.4"

The MConn Mini is a 2.4 inch, and therefore our smallest CAN-Bus capable display. Due to its compact size and four capacitive touch buttons, it allows to add control functionality with only tight installation space available. With IP6K8 and a M12 connector, it is a perfect companion for a variety of marine applications.



Stand-alone Solutions



Bilge Pump Controller

Control and operate the bilge pump and extend its lifetime with an electronic on/off feature. Standard systems connects both main and alarm float switch.



Freshwater Pump Controller

Achieves a significant noise reduction by optimizing the water pump's RPM. All while maintaining consistent water pressure and enabling predictive maintenance.



RGB Lights Controller

Cost-effective solution for changing color and brightness of RGB lights.

Customizable standard color options and dimming functionality.



Wiper & Washer Fluid Controller

Ideal for synchronous control of any wiper motor and washer fluid pump. Fully compatible with standard momentary switches, supporting single button control.



Digital Switching

Modernizing Boat Systems, Enhancing Flexibility and Reliability

Safety, flexibility, reliability – important factors to consider when designing a boats electrical system. Digital switching has a transformative role and impact when modernizing boat systems, replacing cumbersome wiring with efficient digital networks. This not only simplifies the installation and maintenance of electrical systems but also enhances the overall reliability and safety of the boat.

This technology replaces traditional mechanical switches with digital controls, offering greater flexibility and reliability. Digital switching allows

for easy reconfiguration of circuits and enhances the boat's electrical system's efficiency and safety.

Ultimately, the flexibility of our Integrated Control Systems allows for the development of fully customized specialty products. By combining standard components like our CAN controllers, PLCs, relays, and HMIs into innovative solutions, we can create tailored systems that meet the precise needs of our clients, ensuring optimal performance and user satisfaction.



Marine Competence Center

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