# MBB300C

# **Black Box Vessel Monitoring and Control**

The third generation Black Box (MBB300C) is a dedicated processing unit that includes N2KView® vessel monitoring and control software. Unlike a PC that allows any software to be loaded, the MBB300C runs only N2KView® software making it extremely stable and dedicated to monitoring and controlling your vessel. The MBB300 is compatible with Garmin OneHelm $^{\text{TM}}$  and Raymarine LightHouse 3.

The MBB300C is ruggedized for marine use and includes a solid state disk drive to withstand the pounding associated with waves. And since the MBB300C dissipates less than 10 watts, there is no need for internal cooling fans that are noisy and wear out causing electronics to overheat and fail.

The MBB300C connects to a monitor through a VGA connector or an HDMI connector while the associated touchscreen connects through a USB or serial port. Alternatives to controlling the N2KView® software through a touchscreen include keyboards, mice, or track balls connected through USB. In addition to the two completely isolated CAN bus connectors for simple connection to single or redundant NMEA 2000® networks, the MBB300C has an Ethernet port for connecting Internet Protocol (IP) cameras for viewing within the N2KView® software.

Of course you get the same flexibility using Maretron's N2KView® software from the MBB300C as you would running the software on a PC, which includes the ability to configure as many screens as you want with exactly the information you want to see. Plus you get free upgrades to the software as improvements and new features are added.



\* Requires an active internet connection.

#### **PRODUCT**

PART NUMBER	DESCRIPTION
MBB300C-01	Black Box Vessel Monitoring and Control

#### **Product features:**

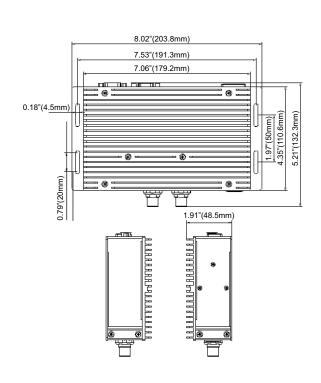
- 9–36 Volt Power Supply
- Solid State Disk Drive
- Fanless Cooling System
- Dual CAN Bus for single or redundant NMEA 2000® Network Connections
- Four USB Ports for touchscreen, keyboard, mouse, trackball, or thumb drive connections
- VGA or HDMI video connection (2560 x 1600 maximum resolution)
- Ethernet connector for IP Camera Input, Email Alert Notification\*, and Maretron Telemetric Cloud Service\*

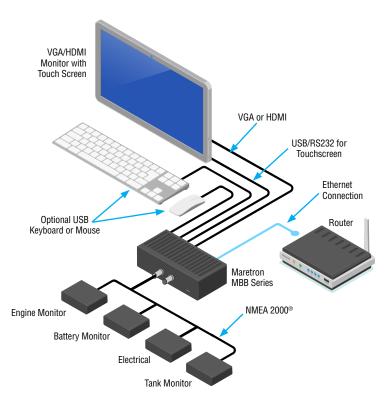






MBB300C Screen Shots





## **SPECIFICATIONS**

PARAMETER	VALUE	COMMENT
Video Connector	VGA Port HDMI Port	For monitor connection
Monitor Resolution	2560 x 1600 Maximum (VGA) 1920 x 1080 Maximum (HDML)	
USB Connector	Two USB 3.0 connections Two USB 2.0 connections	For connecting peripherals (mouse, keyboard, etc.) and/or touchscreen connectivity
Serial Connector	One RS232 9-Pin D Connector	For touchscreen alternative connection
Touchscreen Drivers	TSHARC, 3M MicroTouch, ELO, eGafax, General Touch	Compatible with HID touch compliant panels
Ethernet Ports	RJ-45 GbE	For connection to IP Cameras, Email Notification Alerts*, Maretron Telemetric Cloud Services*, Remote Updates*, and HTLM5 Remote
Controller Area Network (CAN) Ports	Two NMEA 2000® Micro-C Connectors	

## **ELECTRICAL**

PARAMETER	VALUE	COMMENT
Operating Voltage (Dedicated Supply Connection)	9–36 Volts	DC Voltage
Power Consumption (Dedicated Supply Connection)	10 Watts	Maximum
Operating Voltage (NMEA 2000® Connection)	8–32 Volts	DC Voltage
Power Consumption (NMEA 2000® Connection)	80mA	Maximum when Transmitting 100%
Load Equivalence Number (LEN)	1	NMEA 2000® Spec. (1 LEN = 50mA)
Reverse Battery Protection (NMEA 2000® Connection)	Yes	Indefinitely
Load Dump Protection (NMEA 2000® Connection)	Yes	Energy Rated per SAE J1113

# **MECHANICAL**

PARAMETER	VALUE	COMMENT
Overall Dimensions (DxWxH)	5.21" x 8.02" x 1.91" (132.3mm x 203.8mm x 48.5mm)	Excluding connectors and wall brackets
Weight	2.27 lbs (1.03 kg)	
Front Panel Material	Aluminum	
Mounting	4 x M4 VESA Mounting 75mm x 75mm	Any orientation

#### **ENVIRONMENTAL**

PARAMETER	VALUE
Operating Temperature	-20°C to 70°C
Storage Temperature	-40°C to 85°C
Humidity	10%–85% RH non-condensing

#### \* Requires an active internet connection

## **CERTIFICATIONS**

PARAMETER	COMMENT
FCC Class A and CE Mark	Electromagnetic Compatibility
NMEA 2000®	