

N2KView® Vessel Monitoring & Control Software

• Server / Client Architecture

- ✓ Server (N2KServer®) Collects Information from NMEA 2000® Network and Distributes Data to Clients (N2KView®) via Standard Internet Protocol (TCP/IP)
- ✓ N2KServer® Runs on PC or Maretron's Internet Protocol Gateway (IPG100)
- ✓ Clients May Reside on Same Computer as Server, or Other Vessel Computers Networked via Ethernet, or Remote Computers via Internet Connection

• Licensing Administered with USB Hardware License Key (Dongle)

- ✓ Dongle Plugged Into PC or IPG100 Depending on Where N2KServer® is Running



N2KView® Vessel Monitoring and Control Software

Whether you are interested in monitoring your vessel's systems while underway or remotely from your home or office, Maretron's N2KView® software displays the information you need including engines, generators, tanks, rudders, navigation instruments, local weather, and much, much more. N2KView® is completely user-configurable and you are free to create different screens for your exact needs while easily switching from screen to screen for monitoring all your systems. Digital displays, analog gauges, graphic displays, warning lights, and bar graphs, all can be configured exactly how you want them to be. You can even set the operating limits and color bands for analog gauges so you know when things are within limits and when they are not.

N2KView® is a comprehensive suite of software that allows you to pick and choose modules for your exact needs. You start with the base software that allows you to display any of Maretron's vessel monitoring sensors. Once you have the N2KView® base software you can add optional modules like the Alerts, Video, Control, and Fuel Management. Adding the alert module allows you to set as many warnings and alarms as you need so you can be forewarned of potential problems. With the alert module, you can relax knowing that the system is watching for smoke, CO, high bilge water, or anything else you deem important. The video module allows you to add cameras as part of the monitoring system - for example a camera in the engine room - or the cameras can be used as part of the security

Products

PART NUMBER	DESCRIPTION
N2KView-Basis	N2KView Vessel Monitoring Software with Hardware License Key
N2KView-Add	N2KView (Additional) N2KView License added to Existing N2KView-Basis
N2KView-Alerts	Alerts Module (Each Alerts Module requires corresponding Basis or Add License)
N2KView-Video	Video Module (Each Video Module requires corresponding Basis or Add License)
N2KView-Control	Control Module (Each Control Module requires corresponding Basis or Add License)
N2KView-Fuel	Fuel Module (Each Fuel Module requires corresponding Basis or Add License)

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N2KView® Vessel Monitoring & Control Software

- N2KView®-Base
 - ✓ Vessel Monitoring Including Engines, Gensets, Tanks, Rudders, Navigation Instruments, Weather, Battery Monitor, DC/AC Parameters, Safety Systems, Security Systems, Etc.
- N2KView® Optional Modules
 - ✓ Alerts (Alarms and Warnings)
 - ✓ Local and Remote Video
 - ✓ Control (Electrical Switching, SeaRecovery and Dometic Control)
 - ✓ Fuel Management

system. The Control module gives you the ability to manage your electrical system; for example, you can turn lights or pumps on or off directly from N2KView® and even tell if the lights or pumps are burned out and not working. Lastly, the Fuel Management module uses information from the fuel flow monitor, tank monitors, and GPS to provide advanced information like distance and time to empty as well as fuel rate and fuel economy.

N2KView® software can run on your vessel's computer or on standalone products like Maretron's DSM800 display (see page 12) or the Maretron Black Box (MBB100) vessel monitoring system (see page 14). If you want to run N2KView® software on your vessel's computer, you will need either a Maretron USB100 (page 24) or an IPG100 (page 26), which are necessary to get sensor information from the NMEA 2000® network to the computer. If you want to run N2KView® on standalone products like the DSM800 and MBB100, you will need to purchase an IPG100.

N2KView® uses a hardware license key that is plugged directly into a computer's USB port if you are using a USB100 or directly into the IPG100 if you are connecting standalone devices or other PC's connected using Ethernet. The licenses are floating so it doesn't matter where the software is running - for example, on a PC, DSM800, MBB100, smart phone, or tablet, on the boat, or remotely through the Internet, but you do need a separate license for each N2KView® running at the same time.

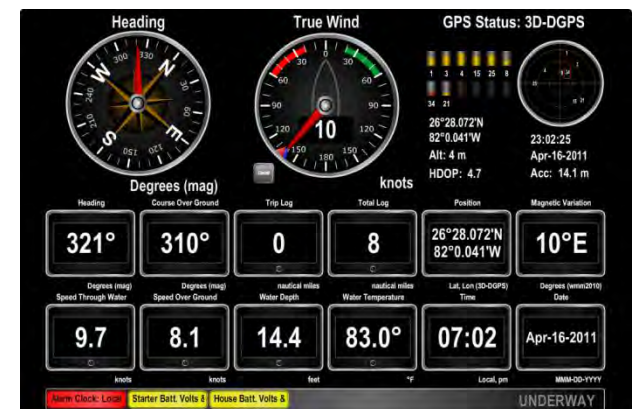
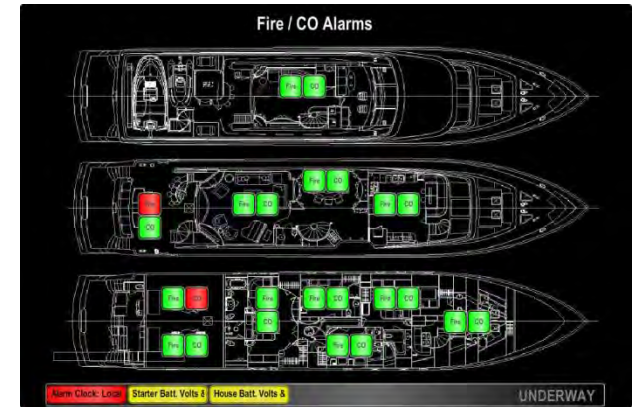
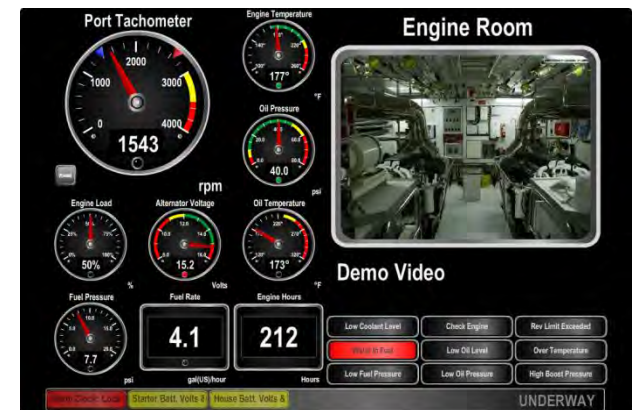
Windows PC Server/Client System Requirements

Parameter	Value	Comment
Operating System	Windows XP/Vista/7 and Mac OS	
CPU Minimum	Pentium® 4 or Equivalent	Latest Service Pack may be Required for Support
CPU Recommended	Pentium® 4, (3.0 GHz)	
Memory Minimum	512 MB RAM	
Memory Recommended	1 GB RAM	
Hard Drive Space	40 MB	
CD-ROM or DVD Drive	Single	
Video Card Minimum	128 MB	Required to Load Software
Video Card Recommended	256 MB	
USB Ports	Two USB Ports – 1.1 or 2.0 Compatible	
Ethernet Port	10BASE-T or 100BASE-TX or 10/100/1000	One Port for Software License Key, One for Monitor Gateway
Display	1024x768 Resolution, 32-bit Color Video	Only Required for Remote Monitoring
Multiple Monitor Support	Dedicated Video Cards 64 MB RAM per	
Certification	NMEA 2000® Standard	Approved

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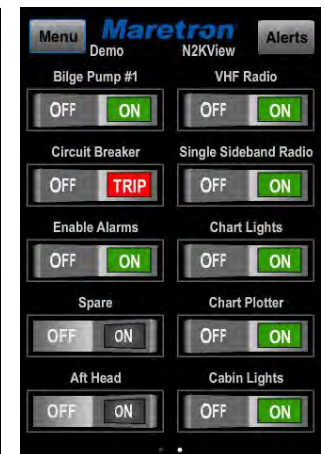
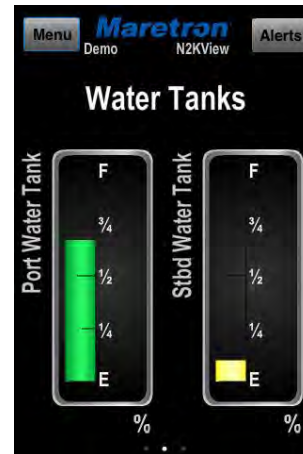
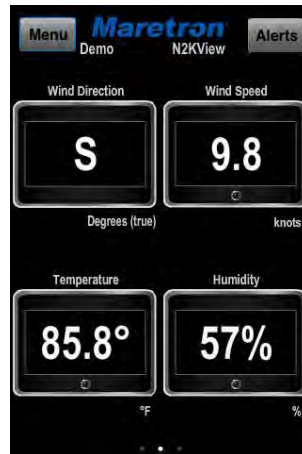
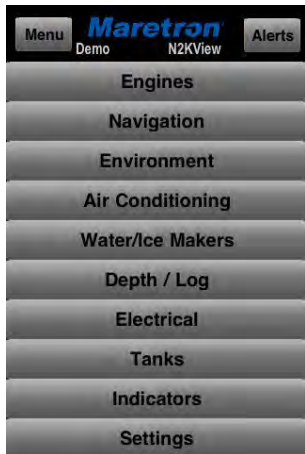
N2KView® Vessel Monitoring & Control Software

- Optimized for Touchscreen Interface (Full Support for Keyboard and Pointing Devices)
- Favorite Screens are Completely User Defined and Tailored for Installed NMEA 2000® Sensors
- As Many Favorite Screens as Desired with User Defined Tab Names
- User Defined Background Images (Vessel Profiles, Deck Views, Systems Diagrams, etc.)
- Integrated Video with Pan, Tilt, and Zoom Controls
- Comprehensive Alerts System Showing Alarms and Warnings at Bottom of Screen (Simple One Touch Acknowledge)
- Emailing On User Selectable Alerts
- User Defined Graphs for Monitoring Trends



N2KView® Mobile

- Requires Hardware License Key (Plugged Into PC or IPG100)
- Available for iPod, iPhone, iPad (Free Download from iTunes)
- Available for Android Smartphones and Tablets
- Favorite Screens are Completely User Defined and Tailored for Installed NMEA 2000® Sensors
- As Many Favorite Screens as Desired with User Defined Tab Names
- Integrated Video with Pan, Tilt, and Zoom Controls
- Comprehensive Alerts System Showing Alarms and Warnings



Touch Screen Vessel Monitoring and Control

- Indoor 8" 800x600 LED backlit LCD panel Resistive Touch Screen (300 nits)
- Dedicated Hardware Boots and Runs N2KView®
- Fanless (Salt Air Not Pulled through the Unit)
- 12VDC Power, Supply 25 Watts
- Giga Ethernet Port
- 2 USB 2.0 Ports
- 2 Serial Ports (RS232/422/485)
- IP64 Compliant Front Panel
- Supported Drivers
 - USB "Standard" Keyboards, Mice, Trackballs
 - Supports Bluetooth mice and keyboards with built-in Bluetooth adapter

DSM800 Vessel Monitoring and Control Indoor Display

The DSM800 is a dedicated touch screen that comes preloaded with Maretron's N2KView® vessel monitoring and control software. The N2KView® software allows you to configure as many favorite screens as you want with exactly the information you want to see. Although not suitable for outdoor applications, the DSM800 provides an extremely simple touch interface for observing and controlling critical systems from inside the vessel.

The DSM800 is ruggedized for marine use and includes a solid state disk drive to withstand the pounding associated with waves. And since the DSM800 only dissipates 25 watts, there is no need for internal cooling fans that are noisy and wear out causing electronics to overheat and fail.

As an alternative to controlling the DSM800 through the touch screen, the DSM800 includes two USB ports for connecting keyboards, mice, or trackballs. The DSM800 also has an Ethernet port for communicating with an NMEA 2000® network through Maretron's Internet Protocol Gateway (IPG100). Although the DSM800 comes pre-installed with the N2KView® software, a separately purchased license plugged into the IPG100 is required (see IPG100 page for more details). The Ethernet port is also used for connecting Internet Protocol (IP) cameras for viewing within the N2KView® software.

DSM800 features:

- 8" LED Backlit LCD Panel with Resistive Touch Screen
- 800 x 600 Pixels
- 300 nits of brightness
- Solid State Disk Drive
- Fanless cooling system

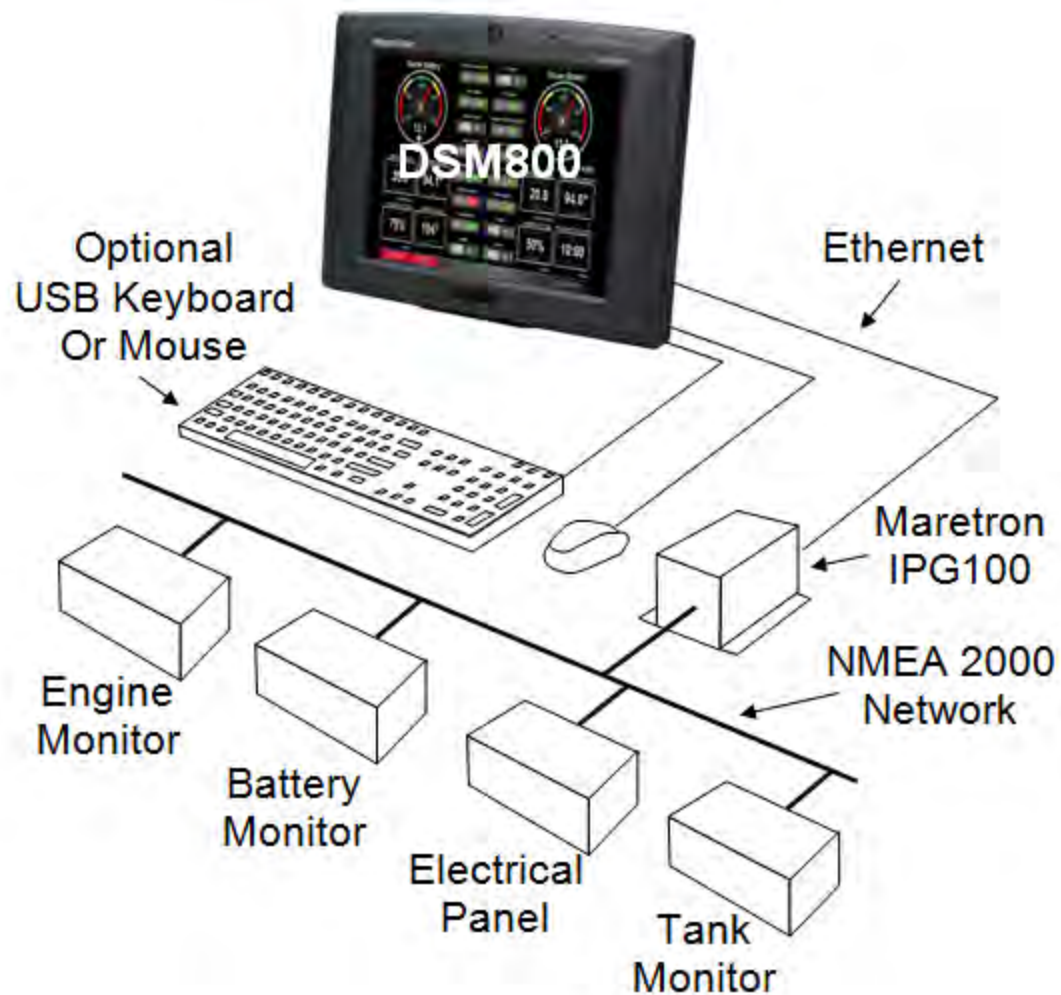
Products	
PART NUMBER	DESCRIPTION
DSM800-01	Vessel Monitoring and Control Indoor Display

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DSM800 Network Diagram



Black Box Vessel Monitoring and Control

- Dedicated Hardware Boots and Runs N2KView®
- Fanless (Salt Air Not Pulled through the Unit)
- 9-36VDC Power Supply, 19 Watts
- Single VGA Port
- RS232 Ports (Only One used for Touchscreen)
- GigaBit Ethernet (Connection to IPG100)
- 4 USB Ports (Keyboard, Mouse, Touchscreen)
- Supported Drivers
 - USB “Standard” Keyboards, Mice, Trackballs
 - Supports Bluetooth mice and keyboards with built-in Bluetooth adapter
 - USB Touchscreens (ELO, 3M Microtouch, Hampshire TSharc, Penmount)

MBB100 Maretron Black Box Vessel Monitoring and Control

Maretron's Black Box (MBB100) is a dedicated processing unit that comes preloaded with Maretron's N2KView® vessel monitoring and control software. Unlike a PC that allows any software to be loaded, the MBB100 runs only N2KView® software making it extremely stable and dedicated to monitoring and controlling your vessel.

The MBB100 is ruggedized for marine use and includes a solid state disk drive to withstand the pounding associated with waves. And since the MBB100 dissipates less than 20 watts, there is no need for internal cooling fans that are noisy and wear out causing electronics to overheat and fail.

The MBB100 connects to a monitor through a VGA connector and associated touch screen through a USB or serial port connection. Alternatives to controlling the N2KView® software through a touch screen include keyboards, mice, or track balls connected through USB. The MBB100 has an Ethernet port for communicating with an NMEA 2000® network through Maretron's Internet Protocol Gateway (IPG100). Although the MBB100 comes pre-installed with the N2KView® software, a separately purchased license plugged into the IPG100 is required (see IPG100 page for more details). The Ethernet port is also used 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 MBB100 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.



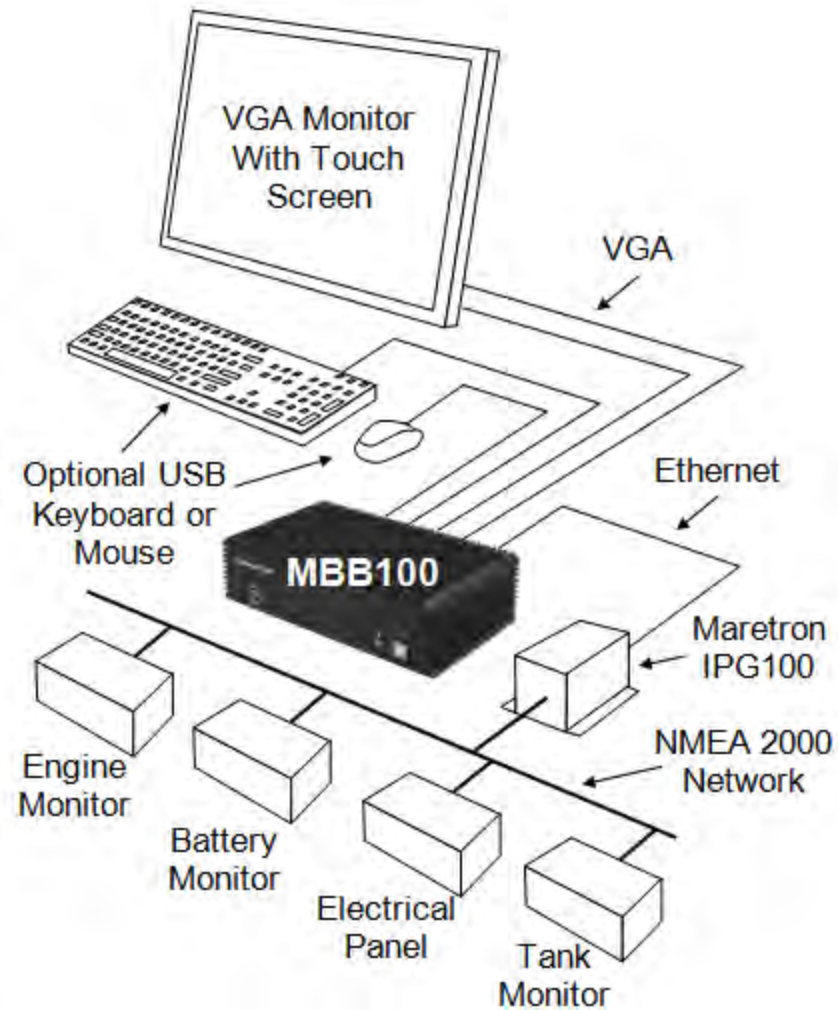
Products	
PART NUMBER	DESCRIPTION
MBB100-01	Black Box Vessel Monitoring and Control



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MBB100 Network Diagram



Maretron Cloud Services

- Remotely and Seamlessly Connect to Vessel Using N2KView® and N2KView® Mobile
- Uses Vessel's Internet Connection to Monitor and Control Vessel from Anywhere in the World
- Utilizes Vessel's Existing Internet Connection (Satellite, GSM, WiFi, etc.)
- Monthly Data Rates - Yearly Subscription
 - 25GB/Month - \$295/Year
 - 50GB/Month - \$495/Year
 - 100GB/Month - \$895/Year

Maretron Cloud Services

Maretron Cloud Services allows you to remotely and seamlessly connect to your vessel using N2KView® or N2KView® Mobile software so you can monitor and control your vessel from anywhere in the world. As long as there is an Internet connection to the vessel, Maretron's Internet Protocol Gateway (IPG100) will automatically log into Maretron's Internet cloud server and the vessel's information will be made available to any remote N2KView® or N2KView® Mobile. Connection between your vessel and remote N2KView® software has never been easier, whether your vessel's Internet connection is via a marina WiFi, satellite connection, GSM or cell phone modem, or any other type of Internet connection, you'll have access to the vessel from anywhere in the world.

Using Maretron Cloud Services is simple, just imagine receiving an email or text notification from the vessel indicating a problem and you simply log onto the vessel using a smart phone, tablet, or PC. Using Maretron's N2KView® vessel monitoring and control software you get a better understanding of the problem and you can even initiate a corrective action like resetting tripped breakers, turning on auxiliary pumps or lights. Or maybe you just want to adjust the air conditioner or start the ice maker on your way to the boat. Whatever the reason, Maretron Cloud Services provides you with a seamless connection to your vessel for peace of mind and convenient access from anywhere in the world.

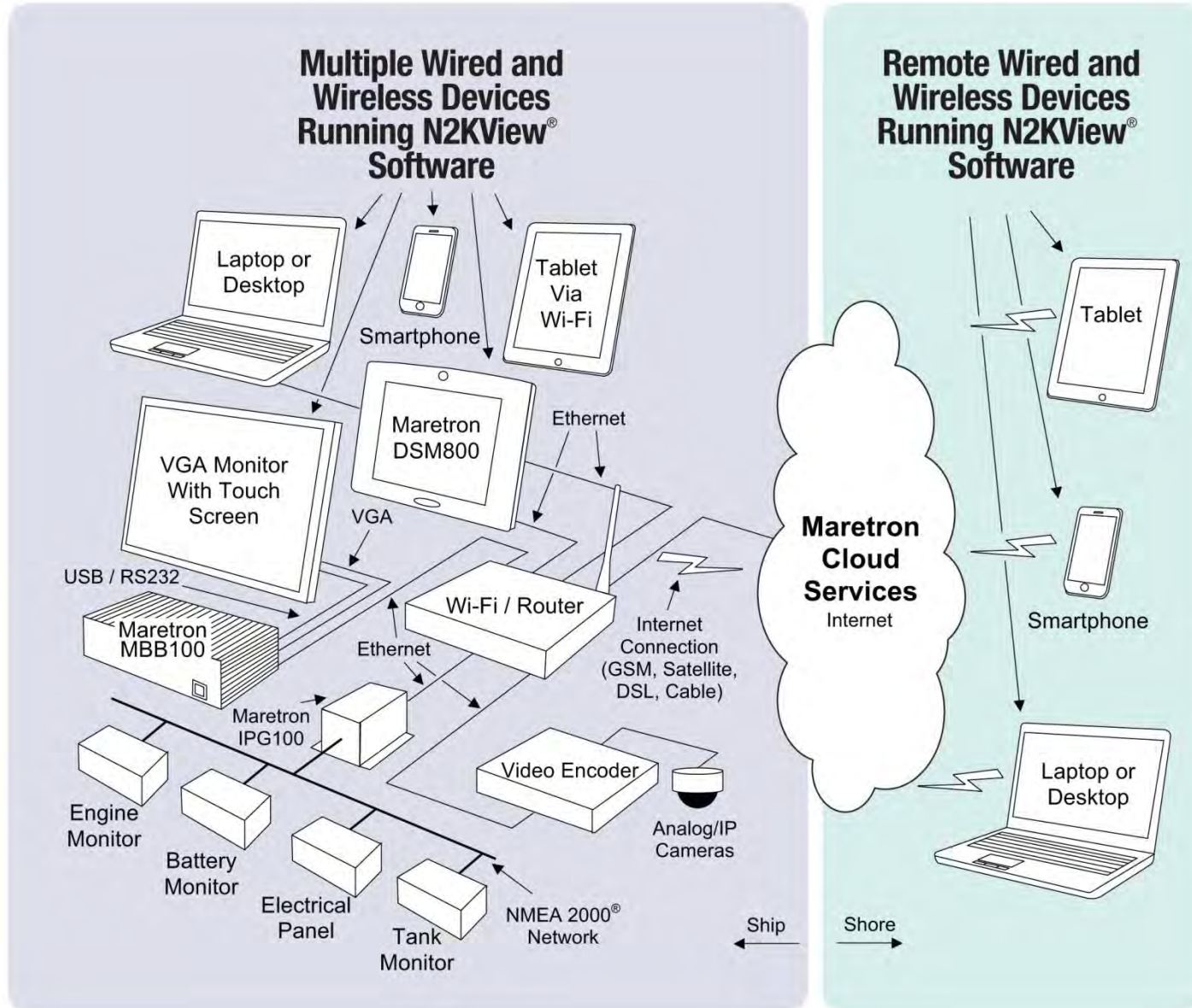
Products

PART NUMBER	DESCRIPTION
MCS-25GB	Remote Vessel Monitoring & Control Data Plan (1 Year Contract Required-25GB/month)
MCS-50GB	Remote Vessel Monitoring & Control Data Plan (1 Year Contract Required-50GB/month)
MCS-100GB	Remote Vessel Monitoring & Control Data Plan (1 Year Contract Required-100GB/month)

Maretron
Vessel Monitoring & Control Systems

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Maretron Cloud Services



Multi-Function Color Display

- Sunlight Viewable
- Interprets and Displays Most NMEA 2000® Data
- 16 User Configurable Favorites Screens
- Computed Fuel Management Displays
- Flush, Surface, or Gimballed Mount
- Available in Black, Gray, and White Enclosures
- Configures Maretron Products
- Audio and Visual Alarms

DSM250 Multi-Function Color Display



Maretron's DSM250 is a high-resolution sunlight viewable color display that allows easy interpretation of NMEA 2000® instrument and navigation data through custom display configurations, featuring an easy-to-use five-key illuminated keypad.

Unlike traditional single-display units, DSM250 users can choose numeric, gauge, or graph formats in single or multiple displays, with cycling options possible for a wide range of favorite data. These multiple display options conserve mounting space and reduce overall system cost.

The DSM250 will directly connect with any NMEA 2000® network and display any or all information captured throughout the vessel. Various audio and visual alarms are also programmable.

The DSM250 displays a multitude of information including AC power, battery, depth, engine, environment, fuel management, GPS, heading, navigation, rudder, speed, tanks, time, transmission, weather, wind and more.

Maretron's DSM250 is engineered and manufactured to the highest standards (IEC 60945 Maritime Navigation and Radio Communication Equipment). Its compact waterproof housing will provide years of reliable performance. The DSM250 is available in three different color cases: black, gray, or white.

Products

PART NUMBER	DESCRIPTION
DSM250-01	High Bright Color Display (Black Enclosure)
DSM250-02	High Bright Color Display (Gray Enclosure)
DSM250-03	High Bright Color Display (White Enclosure)
DSM250ASB07	DSM250/DSM250 Gimbal Mount
DSM250CRPM-01	Package of (2) Black DSM250 Centers
DSM250CRPM-02	Package of (2) Gray DSM250 Centers
DSM250CRPM-03	Package of (2) White DSM250 Centers

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Alarm Module

- Visual & Audible Alerts
 - ✓ Triggered by N2KView® or DSM250
- Loud Alarm (105dB)
 - ✓ Mechanical Damper
 - ✓ Distinctly Selectable Tone Patterns
- Green Operating LED and Red Alarm LED
- Mounts in Standard Electrical Box
- Waterproof
- Black or White Face Plate

ALM100 Alarm Module

Maretron's Alarm Module generates visual and audible alerts for any monitored condition. The Alarm Module includes an extremely loud 105 dB SPL Piezoelectric sounder, along with a red high-brightness LED to indicate an alarm condition. A second green LED indicates that the Alarm Module is powered and ready to be triggered. The audible alarm can sound any one of 32 distinct pre-programmed patterns to indicate different alerts. The Alarm Module can be triggered by alarms generated by Maretron's N2KView® Vessel Monitoring System, or by Maretron's DSM250 Color Graphics Display. The Alarm Module mounts in a standard electric box or can be flush mounted on any surface. Completely waterproof, the Alarm Module can be mounted inside or outside the vessel.



- NMEA 2000® Network Interface
- Super loud 105dB audible alarm
- Bright Red LED visual alarm
- Green LED status indicator
- Mounts in standard electrical wall box or flush mount directly in wall
- 32 selectable alarm patterns
- Waterproof - Can be mounted indoors or outdoors

Products

PART NUMBER	DESCRIPTION
ALM100-01	Alarm Buzzer with Black Cover Plate
CP-BL-ALM100	ALM100 Black Cover Plate
CP-WH-ALM100	ALM100 White Cover Plate

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Leading the way in marine electronics

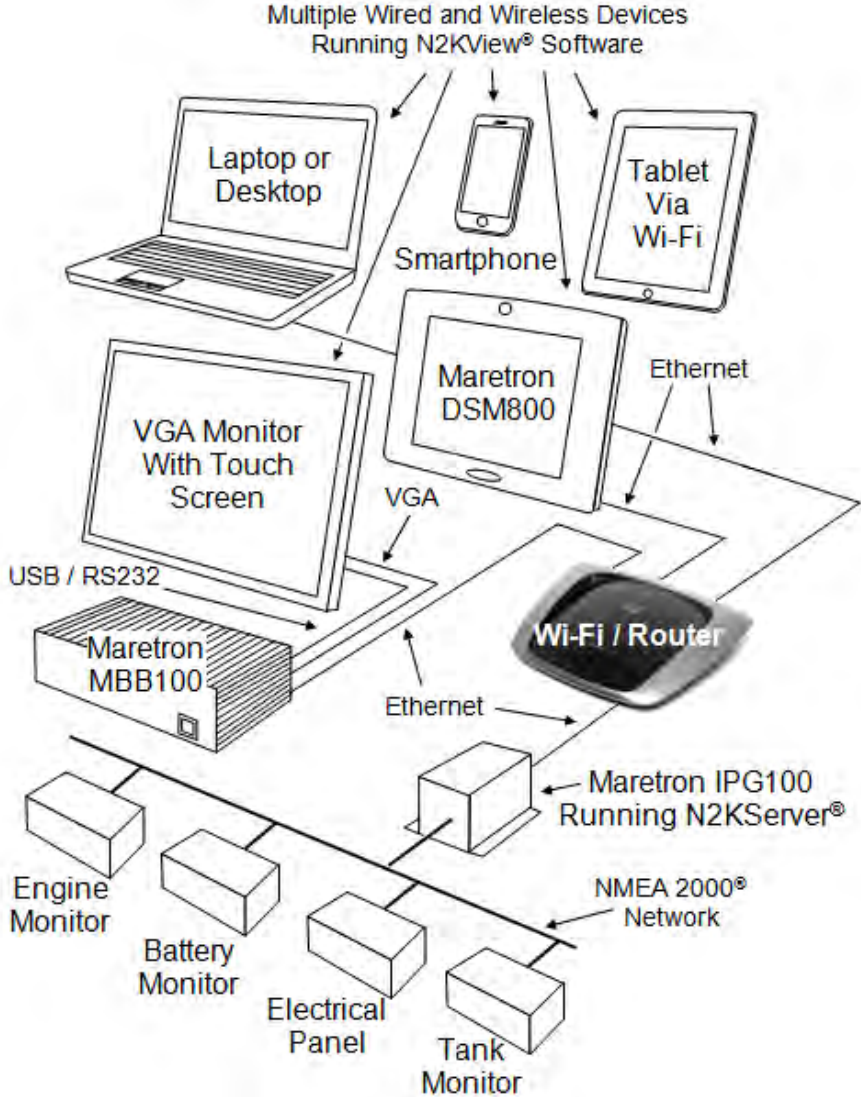
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Linksys E2000 Wireless-N Router

- Preconfigured with SSID (Maretronxxx) and Password (Found on Underside Label)
- Simple User Configuration - DHCP Reservation Reserves N2KServer® IPG or PC IP Address
- Supports either 2.4GHz or 5GHz bands
- Up to 300 Mbps wireless speeds
- Three internal antennas
- Supports WPA/WPA2 wireless security
- Four Gigabit Ethernet ports for wired connections



Linksys E2000 Wireless-N Router Diagram

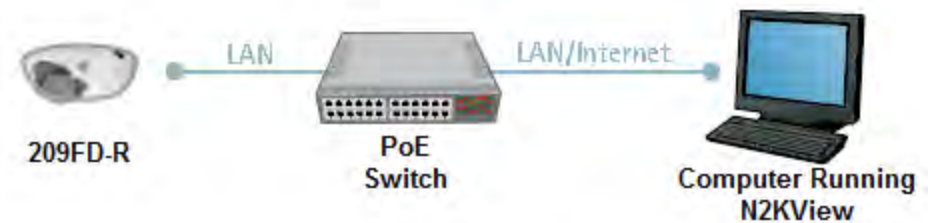
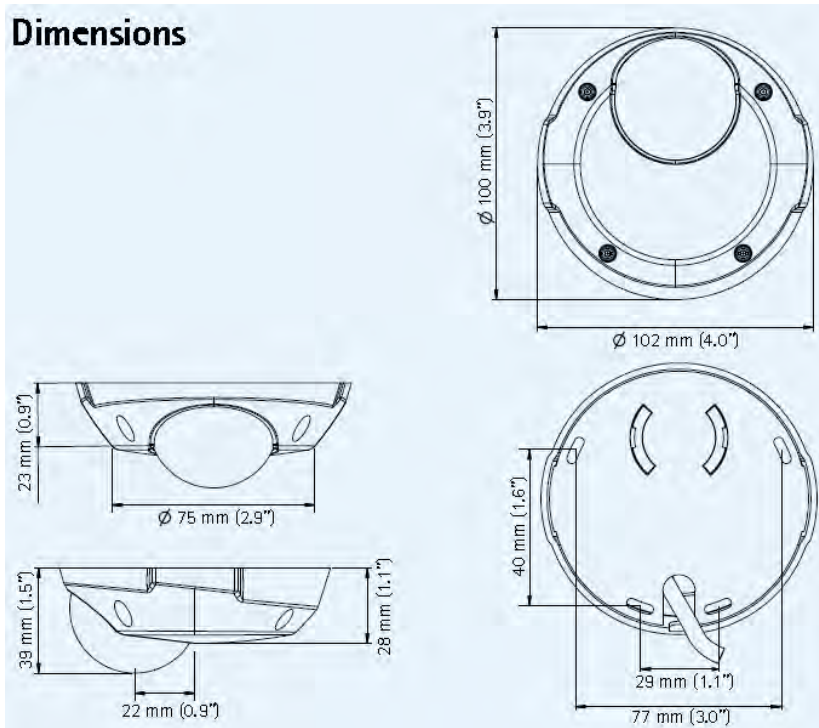


AXIS 209FD-R Fixed Indoor IP Camera

- Flat Design (39mm)
- Progressive Scan Technology
- Vibration, Humidity, Dust Resistant
- Low Light (1.5 lux)
- Resolution 640x480
- Power over Ethernet



Dimensions

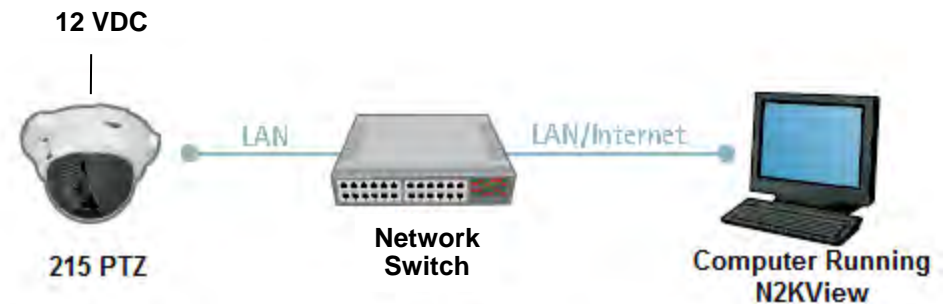
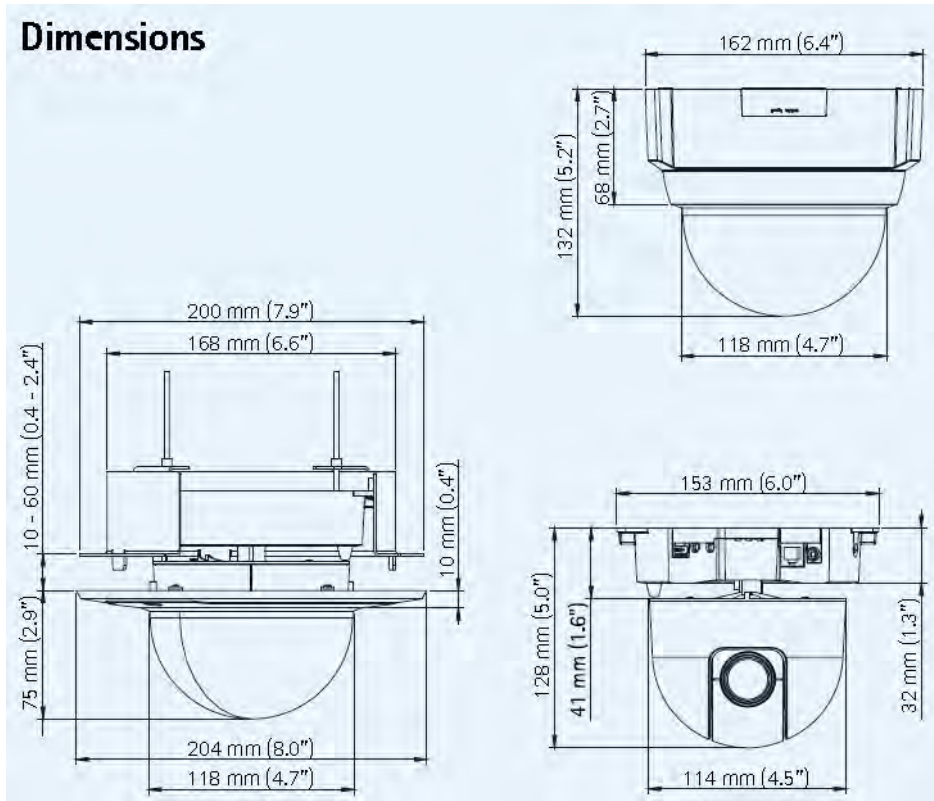


AXIS 215 PTZ Pan, Tilt, & Zoom IP Camera

- 12x Optical Zoom
- Auto Flip
- Day and Night Mode (0.3 lux BW)
- Resolution 704x576
- 12 Volt Supply



Dimensions



AXIS 241S (Single) and 241Q (Quad) Encoders

- High Quality De-Interlaced Video
- MPEG-4 Compression
- 241Q 20/17 (NTSC/PAL) fps
- 241S 30/25 (NTSC/PAL) fps
- Resolution 704x576
- 7-24VDC Volt Supply



Dimensions

