N2KView® 船只监测控制软件

- 服务器主从式架构
  - ✓ 服务器(N2KServer®)从 NMEA 2000® 网络收集信息，并且通过一般标准的因特网协议(TCP/IP) 把信息发送至从属计算机(N2KView®)
  - ✓ N2KServer® 在个人计算机或 Maretron 的因特网协定网关(IPG100)上运作
  - ✓ 从属计算机可以与服务器位于同一部计算机上，或在船上其他透过以太网络连接的计算机上，或者透过因特网连接的远程计算机上
- 透过USB授权钥匙(Dongle)来授与权限
  - ✓依照 N2KServer® 在何处运作，授权钥匙插入到个人计算机或 IPG100 上

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

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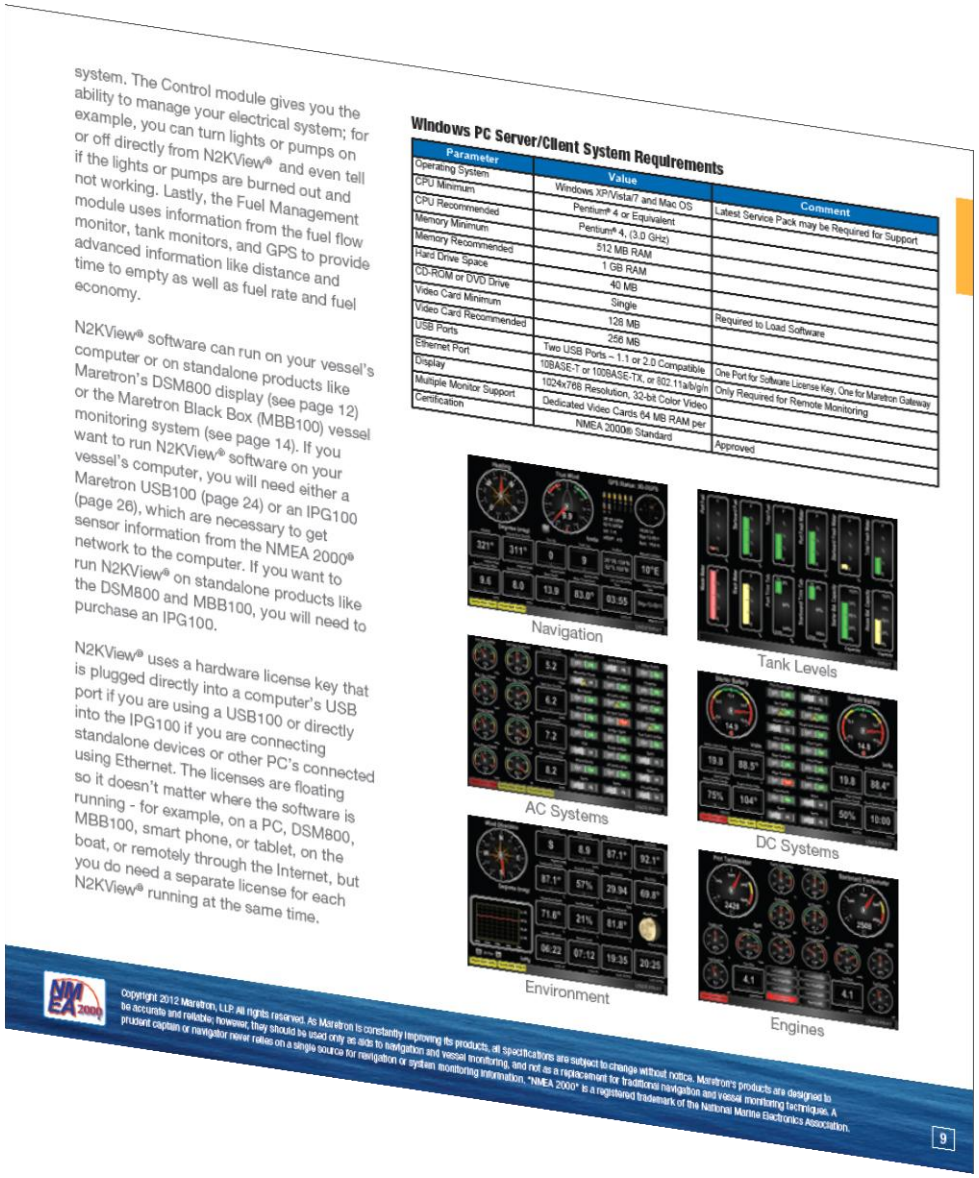
Vessel Monitoring & Control Systems

N2KView® 船只监测控制软件

- **N2KView®-Base**
  - ✓船只监测功能: 包括主机,发电机,水箱,油箱,船舵,导航设备,天气,电池监测,直流电/交流电参数,安全系统,保全防护系统等.
- **N2KView® 选项模块**
  - ✓警报系统模块（警报及警告）
  - ✓在地及远程影像显示模块
  - ✓控制模块（电机开关, SeaRecovery 制水机,Dometic 空调控制）
  - ✓燃油管理



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	Latest Service Pack may be Required for Support
CPU Minimum	Pentium® 4 or Equivalent	
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 802.11a/b/g/n	One Port for Software License Key, One for Maretron 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

Navigation

Tank Levels

AC Systems

DC Systems

Environment

Engines

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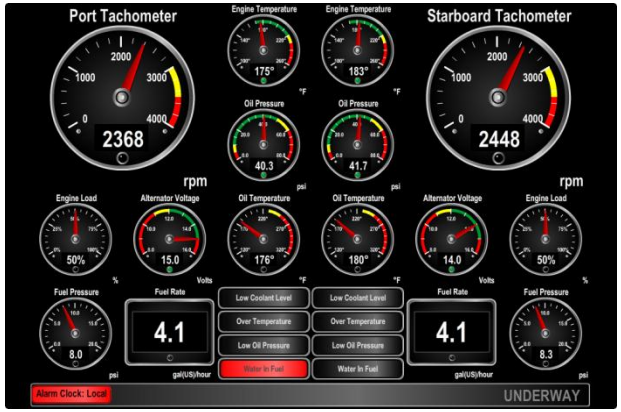
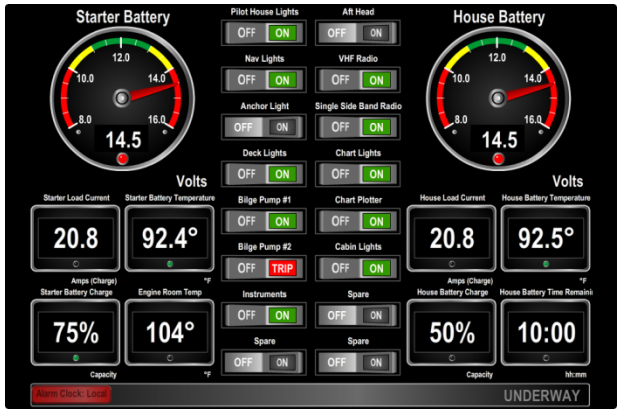
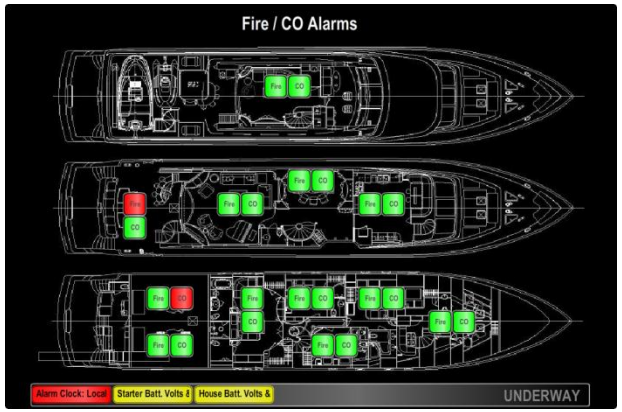
Maretron®
Vessel Monitoring & Control Systems

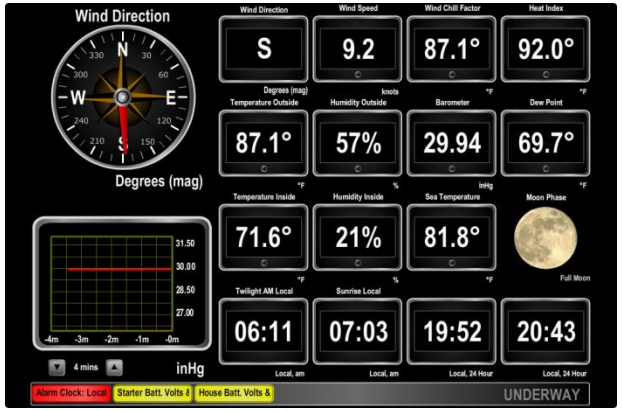
N2KView® 船只监测控制软件

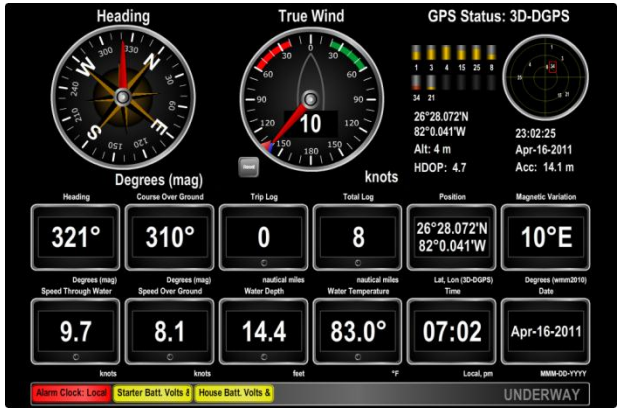
- 最适合用于触控面板接口（完全支持键盘与鼠标）
- 完全由使用者自己定义喜爱的画面，来适用系统所安装的 NMEA 2000® 传感器
- 使用者可以设定自己喜爱的画面，其数量不限，并且可以加上画面名称
- 用户可以自己加上画面背景影像（船只侧视图，甲板视图，系统图等.）
- 影像模块可整合摄影机的左右，上下，焦距拉近拉远的控制
- 完整的警报系统可显示警报与警告于屏幕下方（简单的一次触碰即可确认该警报）
- 用户选定的警报可以透过电子邮件发送出
- 用户可定义曲线图来监测参数的趋势







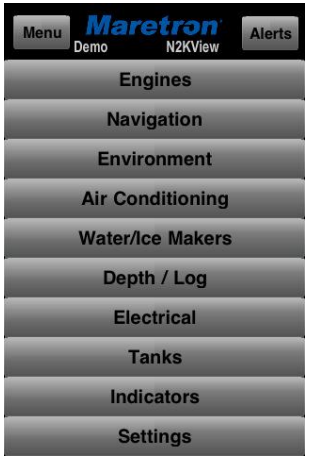


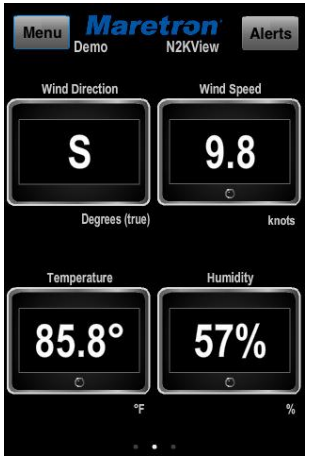


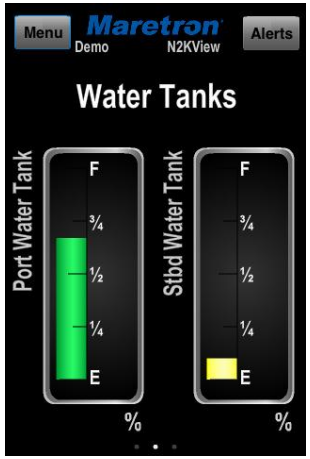
Maretron®
Vessel Monitoring & Control Systems

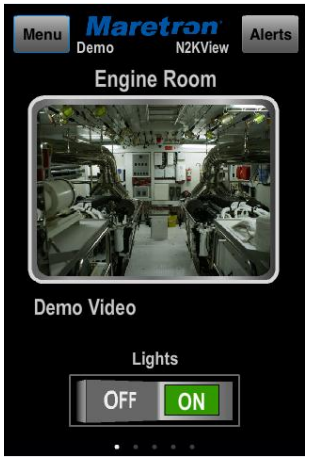
N2KView® 行动平台

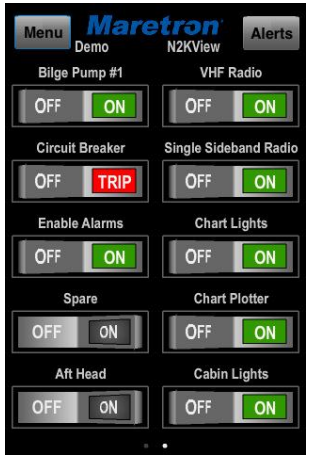
- 需要有授权钥匙插入到个人计算机或 IPG100 上
- 可用于 iPod, iPhone, iPad (免费由 iTunes 下载)
- 可用于 Android 智能型手机和平板计算机
- 完全由使用者自己定义喜爱的画面, 来适用系统所安装的 NMEA 2000® 传感器
- 使用者可以设定自己喜爱的画面, 其数量不限, 并且可以加上画面名称
- 影像模块可整合摄影机的左右,上下,焦距拉近拉远的控制
- 完整的警报系统可显示警报与警示











Maretron®
Vessel Monitoring & Control Systems

船只监测控制系统的触控面板

- 室内用 8吋 800x600 LED 背光 LCD 面板, 电阻式触控面板 (300 nits)
- N2KView®专用硬件, 开机运转即可
- 无风扇式 (含有盐份的空气不会被吸入到设备里)
- 12VDC 电源供应, 25 Watts
- Giga Ethernet Port 以太网络端口
- 2 个USB 2.0 埠
- 2 序列式埠 (RS232/422/485)
- 符合IP64 标准的前面板
- 支持的驱动程序
  - USB 标准键盘, 鼠标, 轨迹球
  - 内建蓝芽转接器,支持蓝芽鼠标与键盘

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.

Products

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

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

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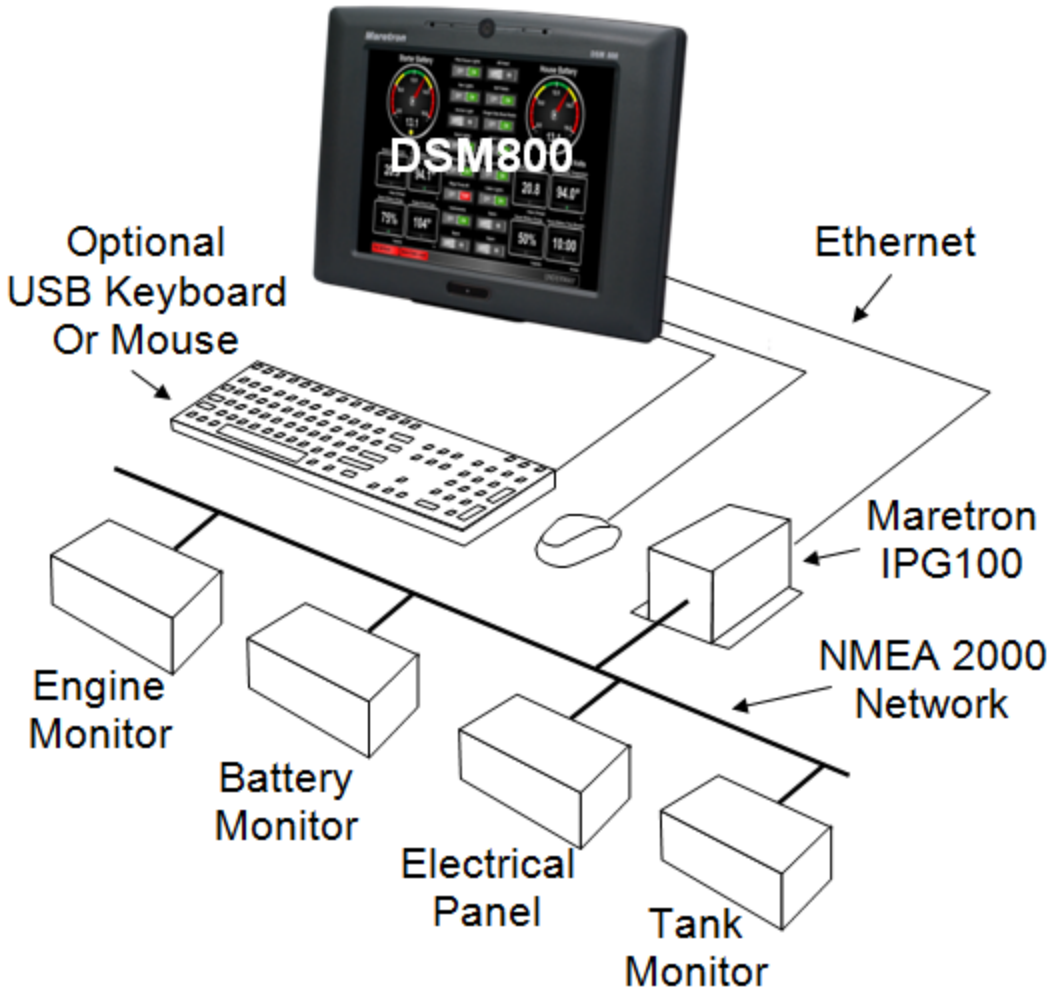
DSM800 网络架构


DSM800
Optional
USB Keyboard
Or Mouse
Ethernet
Maretron
IPG100
NMEA 2000
Network
Engine
Monitor
Battery
Monitor
Electrical
Panel
Tank
Monitor

船只监测控制系统的工业计算机

- N2KView®专用硬件, 开机运转即可
- 无风扇式 (含有盐份的空气不会被吸入到设备里)
- 9-36VDC 电源供应, 19 Watts
- 单一 VGA 埠
- RS232 埠 (用于触控面板)
- GigaBit 以太网络 (用于连接 IPG100)
- 4 个 USB 埠 (键盘, 鼠标,触控面板)
- 支持的驱动程序
  - USB 标准键盘, 鼠标, 轨迹球
  - 内建蓝芽转接器,支持蓝芽鼠标与键盘
  - USB 处控面板 (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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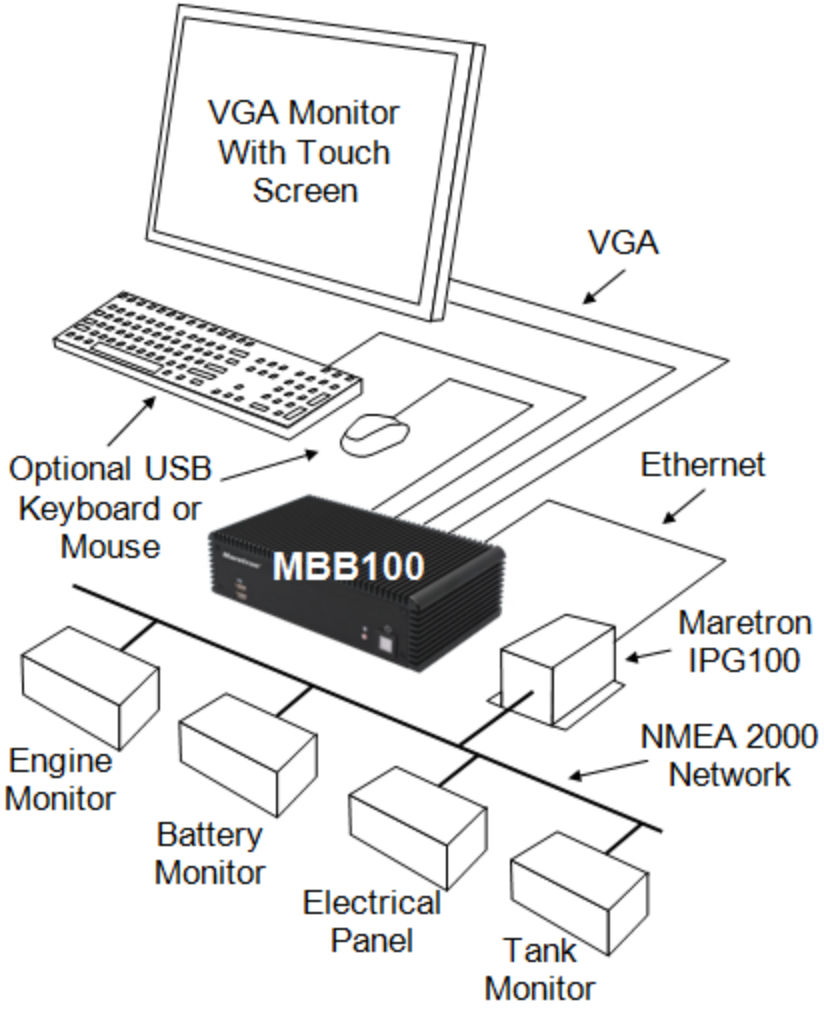
MBB100网络架构


VGA Monitor
With Touch
Screen
VGA
Optional USB
Keyboard or
Mouse
Ethernet
MBB100
Maretron
IPG100
NMEA 2000
Network
Engine
Monitor
Battery
Monitor
Electrical
Panel
Tank
Monitor

Maretron 云端服务

- 远程且无缝的使用 N2KView® 与 N2KView® Mobile 连接到船只系统
- 使用船上的因特网联机,即可从世界任何地方来监测控制船只系统
- 利用船上现有的因特网联机即可 (卫星, GSM, WiFi, 等.)
- 每月数据数据使用量 – 年费计算
  - 25GB/月 - $295/年
  - 50GB/月 - $495/年
  - 100GB/月 - $895/年

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)

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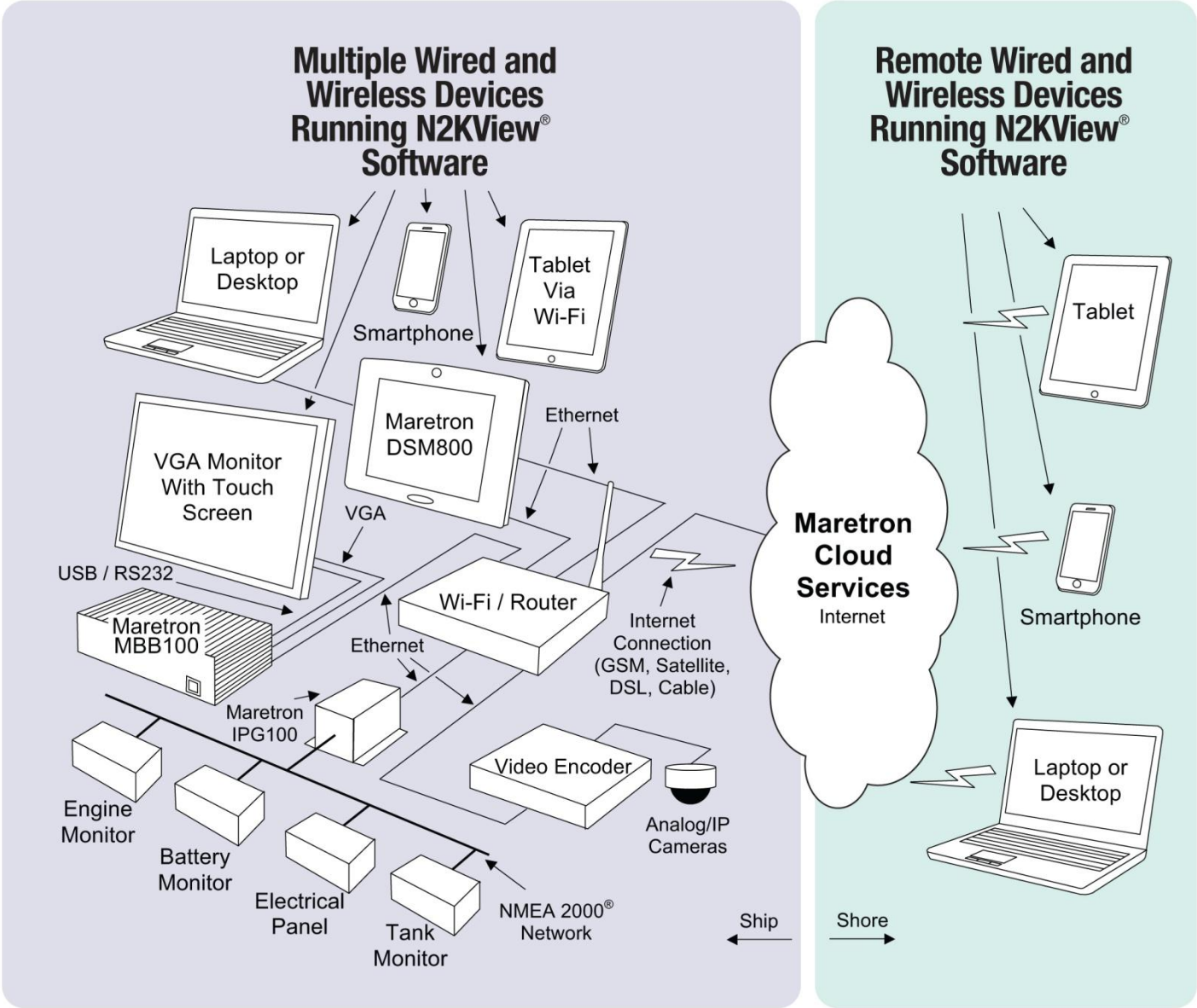

Maretron®
Vessel Monitoring & Control Systems

多功能的彩色显示器

- 阳光下仍可清晰辨读
- 阐释及显示大部分的 NMEA 2000® 资料
- 使用者可自行设定16个喜爱的画面
- 计算并显示燃油使用效率(燃油管理)
- 嵌入式安装,平装,或安装于显示器架上
- 有黑色,灰色,及白色外壳可供选择
- 可用来设定 Maretron 产品
- 具备声音及视觉警报

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)
DSMGIMBALASSBLY	DSM200/DSM250 Gimbal Mount
DSM250CVR2PK-01	Package of (2) Black DSM250 Covers
DSM250CVR2PK-02	Package of (2) Gray DSM250 Covers
DSM250CVR2PK-03	Package of (2) White DSM250 Covers

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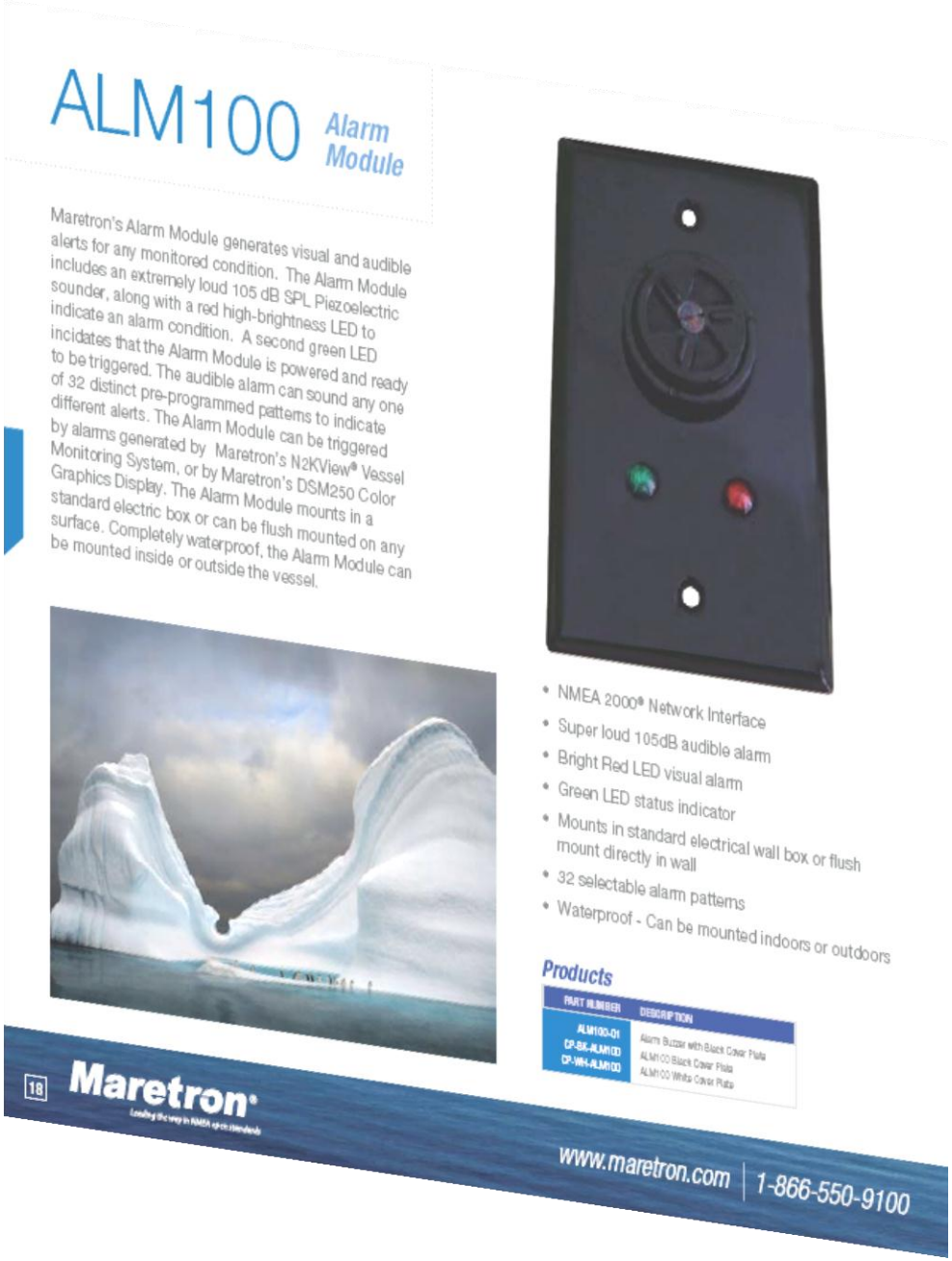
Maretron®
Vessel Monitoring & Control Systems

警报模块

- 发出视觉与声音警示
  - ✓由 N2KView 或 DSM250触发
- 高分贝 警报 (105dB)
  - ✓可降低音量
  - ✓可选择明显不同的音调模式
- 绿色 LED 灯为正常运作,红色 LED 灯为警示
- 可安装于标准电气开关箱
- 防水
- 提供黑色或白色外观面板



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 incidates 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-BK-ALM100	ALM100 Black Cover Plate
CP-WH-ALM100	ALM100 White Cover Plate

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Maretron®
Vessel Monitoring & Control Systems

Linksys E2000 Wireless-N 路由器

- 已经事先设定 SSID (Maretronxxxx) 与密码 (贴于背面)
- 使用者可简单地自行设定 - DHCP Reservation 保留给 N2KServer® 的 IPG 或个人计算机的 IP Address
- 支援 2.4GHz or 5GHz 频道
- 最高到 300 Mbps 无线传输速率
- 三个内部的天线
- 支援 WPA/WPA2 无线网络防护
- 四个 Gigabit 以太网络端口, 用于有线的联机

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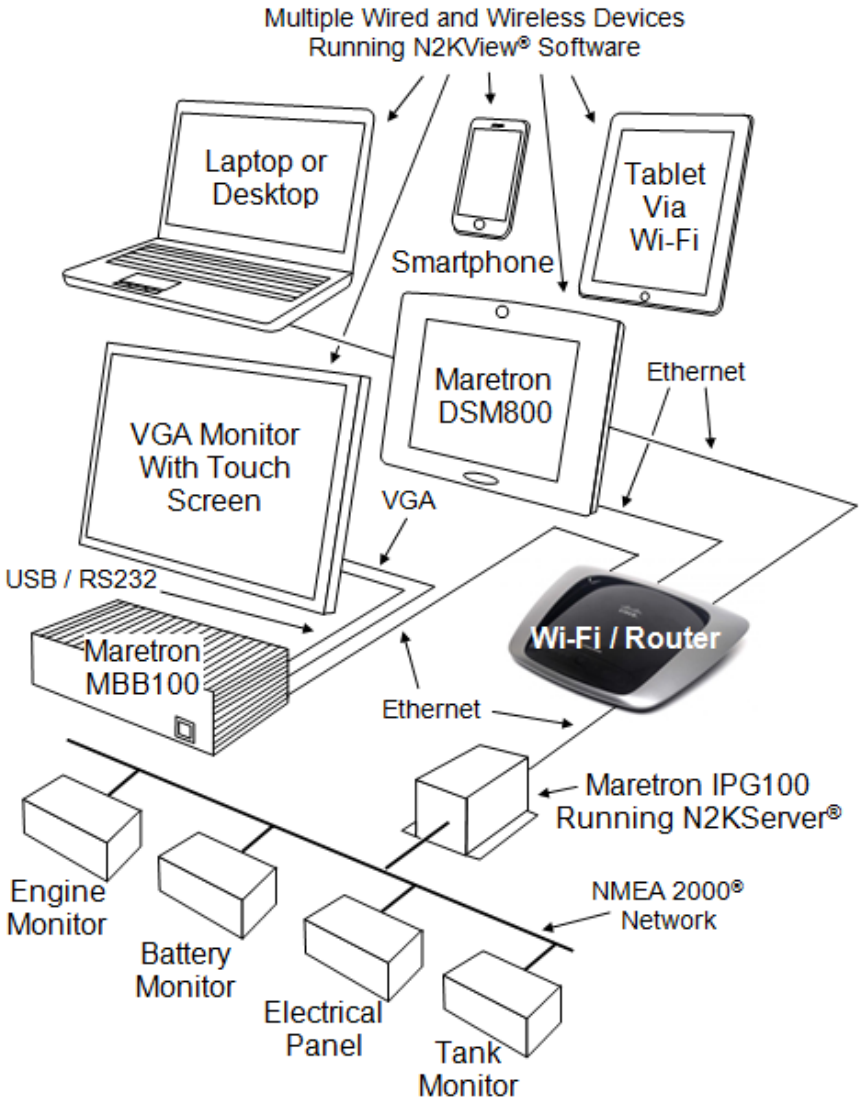
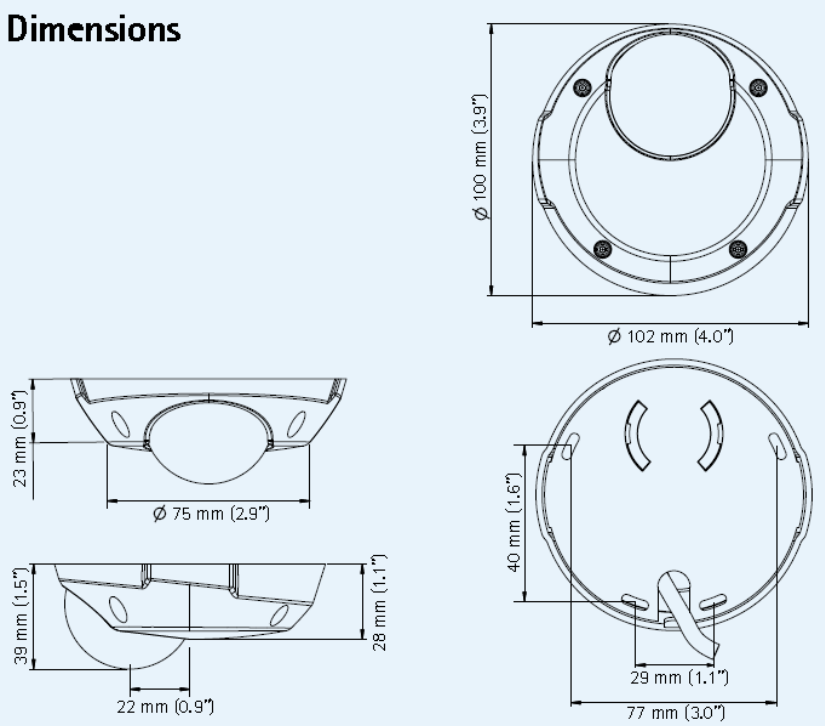
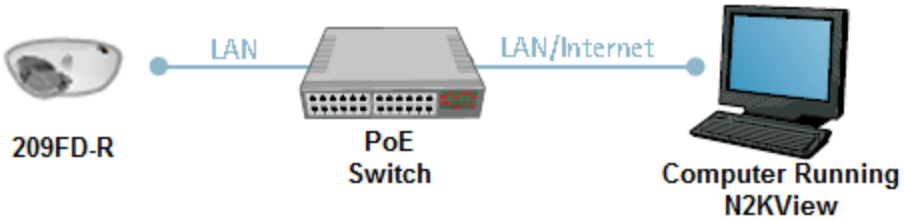
Linksys E2000 Wireless-N 路由器网络架构



AXIS 209FD-R 固定式室内 IP 摄影机

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





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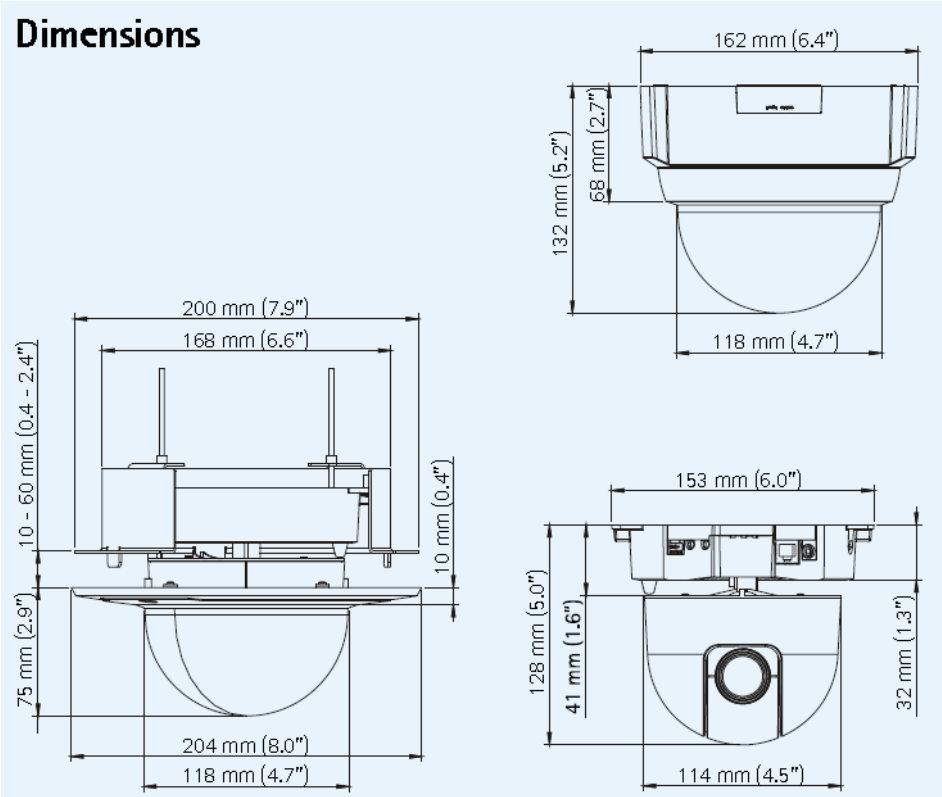
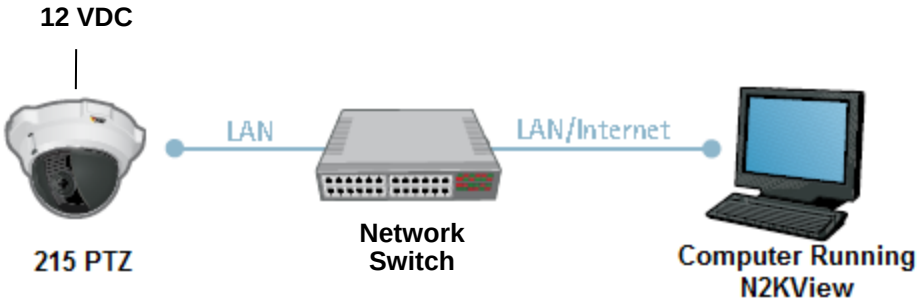
AXIS 215 PTZ 左右, 上下, 焦距调整 IP 摄影机

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





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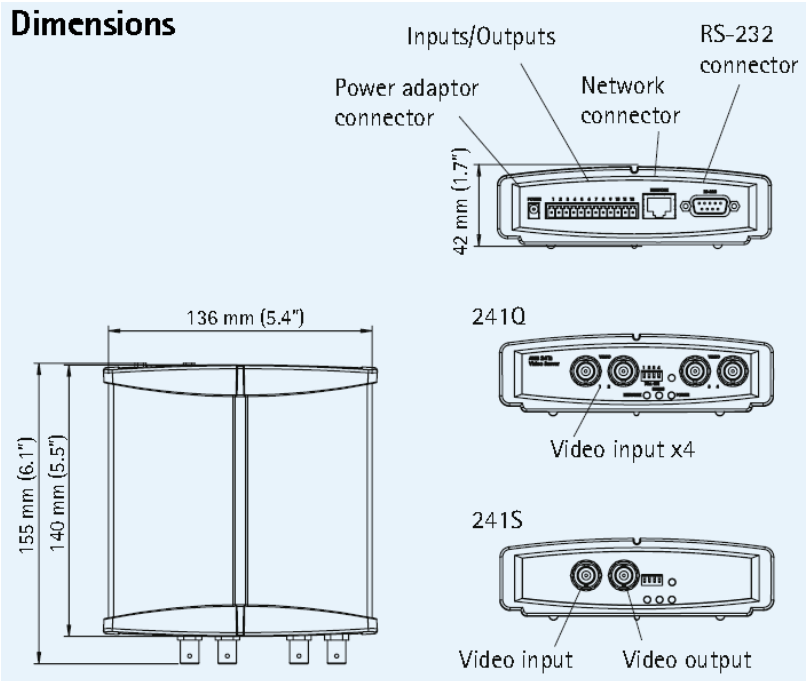
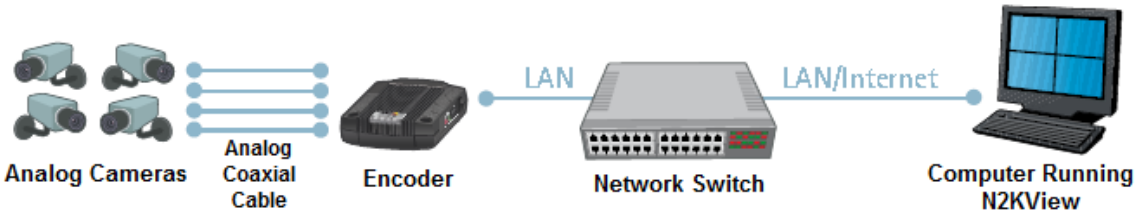
AXIS 241S (单路) 和 241Q (四路) 编码器

- 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





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