IPG100 *Internet Protocol Gateway*

The Internet Protocol Gateway (IPG100) lets you connect PC's, Mac's, tablets, or smartphones to an NMEA 2000® network so you can monitor and control your vessel using Maretron's N2KView® software or using Maretron's N2KView® Mobile app. The conventional way of viewing NMEA 2000® information on the vessel is with a display that is directly connected to an NMEA 2000® network, but with the IPG100, you are not limited to direct connected displays. With the IPG100, you can use devices running N2KView® software and the N2KView® Mobile app to monitor and control your vessel from onboard or ashore.

Products

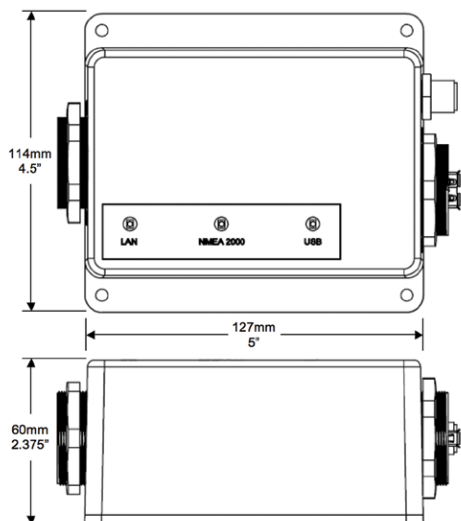| PART NUMBER	DESCRIPTION
IPG100-01	Internet Protocol Gateway
PX0852	USB Waterproof Cover
PX0837/5M00	Waterproof Ethernet Cable 16.4'

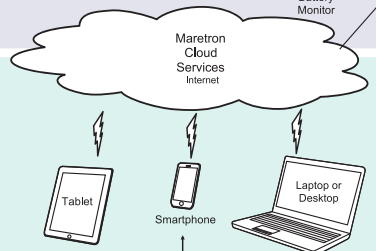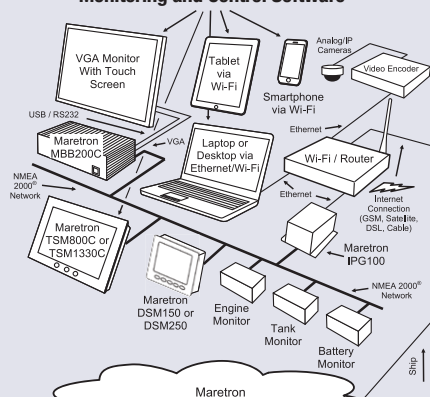*The following accessories are available for the IPG100:*

| PX0852 | PX0837/5M00 |

The IPG100 has an NMEA 2000® and an Ethernet data port for exchanging information between the onboard NMEA 2000® network and Internet Protocol (IP) enabled devices using conventional technology such as routers, switches, and wireless modems. Once enabled, the IPG100 will automatically connect to Maretron's Cloud Services (see page 18), which allows you to remotely connect to your vessel via the Internet. This allows you to keep an eye on your vessel from anywhere in the world.

Maretron®
Vessel Monitoring & Control Systems

Parameter	Value	Comment
NMEA 2000® Connector	DeviceNet Micro-C	Industry Standard Waterproof
NMEA 2000® Isolation	Opto-Isolated	No Electrical Connection Across Bridge
USB Standard	USB 1.1	
USB Connector	USB Type A	Industry Standard Waterproof, for Connection of N2KView Hardware License Key Only
USB Supported Signals	D+, D-, +5V, GND	Bi-directional Gateway
USB Auxiliary Power	+5 Volts < 200 mA	
USB Baud Rate	Up to 12 Mb/s	Full Speed USB Data Rate
Ethernet Interface	100 Mb/s	
Ethernet Connector	RJ-45	Industry Standard Waterproof

Certifications

Parameter	Comment
NMEA 2000® Standard	Level A
Maritime Navigation and Radiocommunication Equipment & Systems	IEC 61162-3
Maritime Navigation and Radiocommunication Equipment & Systems	IEC 60945
FCC and CE Mark	Electromagnetic Compatibility

NMEA 2000® Parameter Group Numbers (PGNs)

Description	PGN #	PGN Name	Default Rate
Response to Requested PGNs	126464	PGN List (Transmit and Receive)	N/A
	126996	Product Information	N/A
	126998	Configuration Information	N/A
Protocol PGNs	059392	ISO Acknowledge	N/A
	059904	ISO Request	N/A
	060416	ISO Transport Protocol, Connection Management	N/A
	060160	ISO Transport Protocol, Data Transfer	N/A
	060928	ISO Address Claim	N/A
	065240	ISO Address Command	N/A
	126208	NMEA Request/Command/Acknowledge	N/A

Electrical

Parameter	Value	Comment
Operating Voltage	9 to 32 Volts	DC Voltage
Power Consumption	<150mA	Average Current Drain
Load Equivalence Number (LEN)	3	NMEA 2000® Spec. (1LEN = 50 mA)
Reverse Battery Protection	Yes	Indefinitely
Load Dump Protection	Yes	Energy Rated per SAE J1113

Mechanical

Parameter	Value	Comment
Size	5.000" x 4.500" x 2.375" 127mm x 114mm x 60 mm)	Including Flanges for Mounting
Weight	12 oz. (340 g)	

Environmental

Parameter	Value
IEC 60945 Classification	Exposed
Degree of Protection	IP67
Operating Temperature	-25°C to 55°C
Storage Temperature	-40°C to 70°C
Relative Humidity	93%RH @40° per IEC60945-8.2
Vibration	2-13.2Hz @ ±1mm, 13.2-100Hz @ 7m/s2 per IEC 60945-8.7
Rain and Spray	12.5mm Nozzle @ 100liters/min from 3m for 30min per IEC 60945-8.8
Solar Radiation	Ultraviolet B, A, Visible, and Infrared per IEC 60945-8.10
Corrosion (Salt Mist)	4 times 7days @ 40°C, 95%RH after 2 hour Salt Spray Per IEC 60945-8.12
Electromagnetic Immunity	Conducted, Radiated, Supply, and ESD per IEC 60945-10
Safety Precautions	Dangerous Voltage, Electromagnetic Radio Frequency per IEC 60945-12

114mm 4.5"

127mm 5"

60mm 2.375"

LAN NMEA 2000 USB

Multiple Wired and Wireless Devices Running N2KView® and N2KView® Mobile Vessel Monitoring and Control Software

VGA Monitor With Touch Screen

Tablet via Wi-Fi

Analog/IP Cameras

Video Encoder

Smartphone via Wi-Fi

USB / RS232

Maretron MBB200C

VGA

Laptop or Desktop via Ethernet/Wi-Fi

Ethernet

Wi-Fi / Router

NMEA 2000® Network

Ethernet

Internet Connection (GSM, Satellite, DSL, Cable)

Maretron TSM800C or TSM1330C/

Maretron IPG100

Maretron DSM150 or DSM250

Engine Monitor

Tank Monitor

Battery Monitor

NMEA 2000® Network

Ship

Maretron Cloud Services Internet

Shore

Tablet

Smartphone

Laptop or Desktop

Remote Wired and Wireless Devices Running N2KView® and N2KView® Mobile