

# 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.

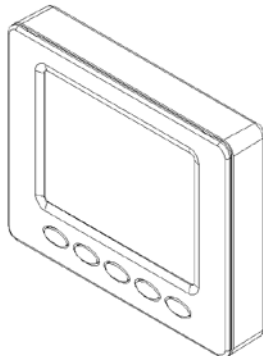
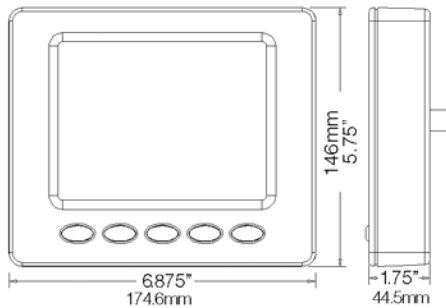
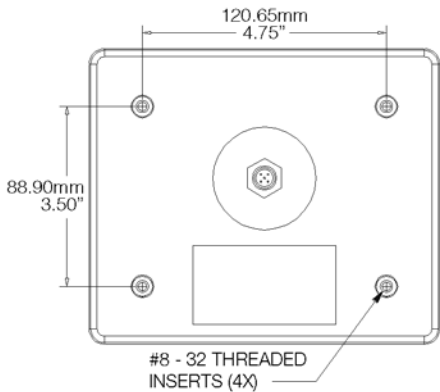
The DSM250 will directly connect with any NMEA 2000® network and display any or all information captured throughout the vessel. Various audio and visual alarms are also programmable.

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)
DSMMNTASSBLY	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



### Certifications

Parameter	Value	Comment
NMEA 2000® Connector	DeviceNet Micro-C	Industry Standard Waterproof
Display Technology	Active Matrix TFT LCD	Sunlight Readable
Display Resolution	320 x 240 Pixels	QVGA Resolution
Display Viewable Area	117mm W x 88mm H	5.7" Diagonal
Display Backlighting	CCFL	3-User-Programmed Levels 0-100%
Keyboard	5 Silicone Rubber Keys	Multi-Colored LED Backlighting
Languages Supported	English, Dutch (Nederlands)	User Selectable

### Specifications

Standard	Comment
NMEA 2000® Standard	Level A
Maritime Navigation and Radio Communication Equipment & Systems	IEC 61162-3
Maritime Navigation and Radio Communication Equipment & Systems	IEC 60945
FCC and CE mark	Electromagnetic Compatibility

### Supported Data Display Types

Instrument Type	Data Types
AC Power	Voltage, Current, Frequency, Line-Neutral Voltage, Line-Line Voltage, Real Power, Reactive Power, Apparent Power, Power Factor, KWH Import, KWH Export
Battery	Voltage, Current, Temperature, State of Charge, State of Health, Time Remaining, Ripple Voltage, Power
Depth	Water Depth, Transducer Offset
Engine Monitor	Tach., Eng. Hrs., Oil, Coolant, Boost & Fuel Pres., Voltage, Oil & Coolant Temp., Fuel Rate, Tilt/Trim
Environment	Barometer, Heat Index, Hum. Inside & Outside, Moon Phase, Sunrise, Sunset, Temp. Dew Point, Temp. Eng. Room, Temp. Inside, Temp. Sea, Twilight AM & PM, Wind Chill
Fuel Management	Total Fuel Rate, Total Fuel Economy, Total Fuel Remaining
GPS	COG, SOG, DOP, Position, Satellites, Time
Heading	Heading, Rate of Turn, Variation
Navigation	BOD, Drift, Set, XTE, TTG, ETA, VMG, DTW, BTW, Rolling Road, Datum, Waypoint Number & Name, COG, SOG
Rudder Indicator	Rudder Position and Order
Speed	Through Water, Over Ground, Total Log, Trip Log
Tank Monitor	Capacity, Level, Remaining
Time	Date Local, Date UTC, Time Local, Time UTC
Transmission	Gear, Oil Pressure, Oil Temperature
Trim Tabs	Bar Graph
Wind	Apparent Direction and Speed, True Direction and Speed, Ground Direction and Speed

### Electrical

Parameter	Value	Comment
Operating Voltage	9 to 32 Volts	DC Voltage
Power Consumption (Maximum)	< 650mA	Low Supply, Full Brightness
	< 200mA	Nominal Supply, Low Brightness
Load Equivalence Number (LEN)	13	NMEA 2000® Spec. (1 LEN = 50mA)
Reverse Battery Protection	Yes	Indefinitely
Load Dump Protection	Yes	Energy Rated Per SAE J1113

### Mechanical

Parameter	Value	Comment
Size	6.875" x 5.75" x 1.75" (174.6mm x 146mm x 44.5mm)	Including Flanges for Mounting
Weight	26 Oz. (737g)	
Mounting	Surface or Flush Mount	

### Environmental

Parameter	Value
IEC 60945 Classification	Exposed
Degree of Protection	IP67
Operating Temperature	-25°C to 55°C
Storage Temperature	-40° to 70°C
Relative Humidity	93%RH @ 40°C per IEC 60945-8.2
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 7 days @ 40°C, 95%RH after 2 hour Salt Spray per IEC 60945-8.12
Electromagnetic Emission	Conducted and Radiated Emission per IEC60945-9
Electromagnetic Immunity	Conducted, Radiated, Supply, and ESD per IEC 60945-10
Safety Precautions	Dangerous Voltage, Electromagnetic Radio Frequency per IEC 60945-12

