

DSM250 *Multi-Function Color Display*



Maretron's DSM250 is a high-resolution sunlight viewable color display that interprets and displays NMEA 2000® instrument, navigation, and vessel monitoring data. The DSM250 is a user friendly dedicated marine display with custom screen configurations and an easy-to-use five-key illuminated keypad. In addition to the monitoring and display capabilities, the DSM250 features an alert/ alarm package and electrical switching capability.

Unlike traditional single-display units, DSM250 users can choose numeric, gauge, bar 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.

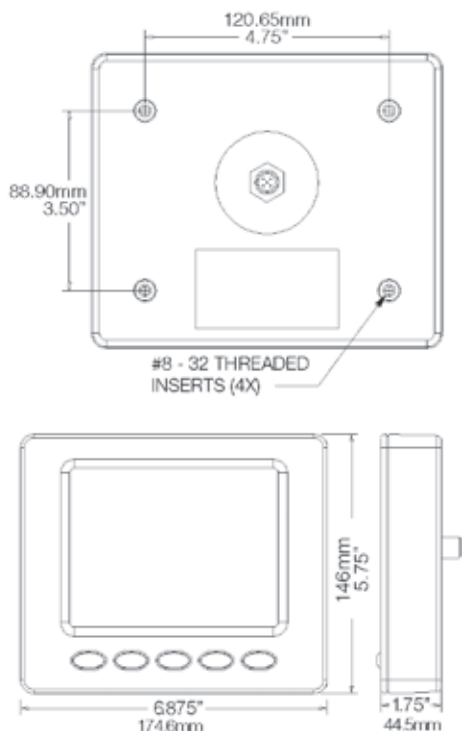
The DSM250 will directly connect with any NMEA 2000® network and with the exception of AIS data will display any or all information captured throughout the vessel. Various audio and visual alarms are also programmable.

The DSM250 displays a multitude of information including AC power, anchor status, battery, depth, electrical distribution, engine, environment, fuel management, GPS, heading, navigation, pressure/ vacuum, rudder, speed, status indicators, tanks, temperature, time, transmission, water makers, weather, wind and more.

Maretron's DSM250 is engineered and manufactured to the highest standards (IEC 60945 Maritime Navigation and Radiocommunication 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



Flush Mount



Surface Mount



Gimbal Mount Helm



Gimbal Mount Ceiling



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Specifications

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

Certifications

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	Average Frequency, Average L-N Voltage, Average L-L Voltage, Phase A Frequency, Phase A L-N Voltage, Phase AB L-L Voltage, Phase B Frequency, Phase B L-N Voltage, Phase BC L-L Voltage, Phase C Frequency, Phase C L-N Voltage, Phase CA L-L Voltage,
Anchor	Watch
DC	Current, Voltage, Battery Temperature, Battery State of Charge, Battery Time Remaining, Ripple Voltage, Power
Depth	Water Depth, Water Below Transducer, Transducer Offset
Elec. Distribution	Switch/Breaker, Breaker Current
Engine Monitor	Boost Pressure, Hours, Coolant Pressure, Coolant Temp., Exhaust Gas Temp., Fuel Pressure, Fuel Rate, Oil Pressure, Oil Temp., Tachometer, Tilt/Trim, Voltage, Fuel Economy, Fuel Consumption, Percent Load, Percent Torque, Trip Fuel Used,
Environment	Barometer, Heat Index, Humidity Inside, Humidity Outside, Moon Phase, Sunrise, Sunset, Dew Point, Temp. Engine Room, Temp. Inside, Temp. Main Cabin, Temp. Outside, Temp. Sea, Twilight AM, Twilight PM, Weather, Wind Chill
Fuel Management	Distance to Empty, Time to Empty, Total Fuel Capacity, Total Fuel Level, Total Fuel Consumption, Total Trip Fuel Used, Total Fuel Economy, Total Fuel Rate, Total Fuel Remaining
GPS	COG, Lat/Lon, SOG, DOP, Satellites, Time, Accuracy
Heading	Heading, Rate of Turn, Variation
Humidity	Inside, Outside, User Defined
Indicator	Status
Navigation	BOD, BTW, COG, XTE, DTW, ETA, Lat/Lon, Rolling Road, Set/Drift, SOG, TTG, VMG, Waypoint Number & Name
Pressure/Vacuum	Water, Barometric, Compressed Air, Engine Boost, Engine Coolant, Engine Fuel, Engine Oil, Hydraulic Oil, Steam, Transmission Oil, User Defined
Rudder	Angle & Order
Speed	Through Water, Over Ground, Total Log, Trip Log
Tanks	Capacity, Level, Remaining
Temperature	Wind Chill, Bait Well, Battery, Engine Coolant, Engine Oil, Engine Room, Exhaust Gas, Freezer, Heat Index, Heating System, Inside, Live Well, Main Cabin, Outside, Refrigeration, Sea, Transmission Oil, User Defined
Time	Local Date, UTC Date, Moon Phase, Sunrise, Sunset, Local Time, UTC Time, Twilight AM, Twilight PM
Transmission	Gear, Oil Pressure, Oil Temperature
Vessel	Pitch, Roll, Trim Tabs, Keel
Watermaker	Sea Recovery Status Display
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