



PLEX SDM-500

THE SMART DASH DISPLAY & LOGGER

Datasheet – AUG2014

BEST-IN-CLASS VIEWING ERGONOMICS

4.3" High-brightness & Resolution Daylight View TFT Display **UNIQUE!**

With luminance of 1,000 candela per square meter (cd/m²) and resolution of 480 x 272, you end up with a strikingly vivid monitor that is easily readable both in direct daylight and low light ambient conditions

QuickGlance™ UI **UNIQUE!**

Configurable 3-level parameter color coding minimizes distraction and communicates engine status with just a quick glance

Ultra-fast Display Refresh Rate

20Hz display refresh rate ensures a smooth, real-time-feel visual experience. You see exactly what is happening, at the right moment.

Automatic Display Dimming

A sensitive light sensor enables adaptive display dimming to suit the light conditions

High-brightness, Narrow-beam LEDs

7 auto-dimmable shift lights with configurable set-points help you optimize your gear changing

DASHBOARD FRIENDLY MOUNT AND INSTALLATION

19mm Total Installation Depth **UNIQUE!**

Uniquely shallow total installation depth make the SDM-500 suitable even for placement over OEM dashboards. No protruding wires & no connectors from the back to get in your way.

Default Motorsport Wiring

A high-quality and durability Tyco Spec44 wiring comes default with every SDM-500 and provides reliable connectivity to a variety of inputs and outputs

FULL CONTROL AT YOUR FINGERTIPS

4-dimensional Wired Joystick **UNIQUE!**

Control your SDM-500 easily with the supplied wired joystick that can be used for device set-up, menu browsing/page changing and controlling the data-logging function. Being small and lightweight, yet ergonomic and rugged the joystick adds a new level of safety and convenience.

SMART REAL-TIME DISPLAYING OF ENGINE DATA

Auto Display Page Changing

Keep your hands on the wheel and your focus on the track. All the rest will be taken care of.

Min. & Max. Values with 1-click **UNIQUE!**

Check min & max values of your run effortlessly for each and every display object with just a single click

Rolling-chart Display Objects **UNIQUE!**

Real-time rolling displays of pre-defined parameters with configurable refresh rate that shows value history from 3 sec up to 10 min

High-visibility Alarms

User configurable warning & limit functionality. Easily set alarms without then need for a PC. Also save the last100 in memory

ON-DEVICE PRACTICAL DATA LOGGING & REVIEWING UNIQUE!

An integrated 256MB data logger lets you record up to 7,4hours at 20Hz. The logged files can be exported to the SDM-WIN software for further analysis, but can also be reviewed effectively on the device without the need for a PC. The on-device log-file reviewing provides reduced complexity, saves valuable time and adds unique convenience all of which are necessary for both racing and street applications.

ADVANCED ENGINE LOG UNIQUE!

Practical Histograms

Engine usages history is kept and presented via histograms for the following parameters: RPM, MAP, TPS, ECT, OILT, BATV, EGT1 & EGT2

Min. & Max Values

Maintain an independent log file that includes minimum and maximum values of: RPM, MAP, ECT, OIT, AIT, FUEL, EGT1/2 and the min. BATV

Also: Alarm History

Store the last 100 alarms in memory along with their date, time and alarm value and retrieve them easily for reference via the free PC software

RICH CONNECTIVITY

- 2 Can-Bus Ports for Simultaneously Receiving Data from Multiple Devices
- 1 RS232 Serial Ports for Older ECUs and GPS units
- USB Port for Configuration, Firmware Update and Log-file Downloading
- 1 Lin Bus for Smart Sensors
- 3 Multi-purpose inputs for Connecting Sensors and Switches
- Dual EGT Inputs (up to 1250 deg C)
- Built-in Protocol Decoding for Most After Market ECUs
- 2 Auxiliary Outputs
- GPS Module kit/Lap timing functionality COMING SOON!

TECHNICAL SPECIFICATIONS

Dimensions	w 123mm, h 90mm, d 19mm, weight 270g
Operating Temp	-10 to +60 deg C
Operating Voltage Range	6 - 18V DC (power supply protected against reverse voltage, double voltage and load dump conditions)
Inputs	2 x multi-purpose inputs that can be used as 0-5V analog inputs, NTC temperature inputs, digital frequency inputs or switch inputs with software enabled pull-up resistors. Protected against over voltage, equivalent load is 100K Ohm to ground, 20KHz first order low pass filter
	1 x multi-purpose digital input that can be used as LIN bus input/output, digital frequency inputs or switch input. Protected against over voltage, equivalent load is 47K Ohm to +12V
Outputs	2 x configurable pull to ground outputs with PWM capability. Protected against over current and over temperature. Maximum drive capacity 4A at 50% duty cycle.
	7 x high brightness, narrow beam shift light LEDs with automatic dimming in low light conditions
	1 x multi color status LED to indicate if logging and/or alarms are active
Internal Sensors	3-axis accelerometer
	Ambient light sensor to automatically dim the display to suit light conditions
	Internal instrument temperature sensor
	+12V power supply voltage measurement
	+5V sensor power supply voltage measurement
Body	Anodized aluminum