# NEW PLEX SDM-330®

# 4.3" Pro-level Display & Logger for Dashboards or Steering Wheels









#### Description

The New PLEX SDM-330® is an ultra-compact, 4.3" high-performance display & logger designed for all types of vehicles, suitable both for dashboard or steering wheel installation. Housed in a light-weight CNC aluminum enclosure with IP67 protection, the SDM-330 features a 1k cd bright IPS TFT display and comes with our renowned proprietary clean UI that places emphasis on effectiveness vs impression. The new dash display will be available in a basic display only version with optional upgrades for USB logging and GPS/IMU. This way, it will succeed both the now discontinued SDM-300 & SDM-500, whilst offering improved functionality, weather protected enclosure and fully redesigned electronics that make it's performance equivalent to that of our highest-end models.

#### Applications

- Automotive
- Motorcycle
- Steering wheels
- Marine
- Off-road
- Snowmobiles

#### **Key Features**

- ► 4.3" High-brightness & contrast IPS Display with broadband anti-reflective glass
- ► Ultra compact & rugged enclosure with IP67 protection
- ► Powerful multi-core processor
- ► Fully configurable CAN BUS, I/Os and UI
- ► Design suitable for dashboard and steering wheel installation
- ► Unlimited USB data-logging (option)
- ▶ 25Hz GNSS / 100Hz IMU module (option)

### **Price (preliminary)**

#### 949EUR - 1.349EUR

#### **Technical Specifications**

Inputs						
Analog/Digital/Frequency 0-5V	4					
Analog/Digital/Frequency 0-16V	4					
Switch/Button Inputs	8					
Outputs						
AUX High Side	2 (lim 3A)					
LEDs	12 RGB					
Communications						
Can Bus Ports	2					
RS-232 Ports	1 (shared with CAN2)					
Lin Bus Ports	1					
USB	1 (for config. & logging)					
WiFi	for configuration					
Internal Sensors						
Real Time Clock	with battery backup					
Device/Sensor voltage monitor	+12V supp./+5V sensor supply					
Device Temperature monitor	Yes					
Ambient light sensor	Yes					
Accelerometer	external option					
GPS / GNSS	external option					
Data Channels						
Max Data Channels	256 (option for more)					

256 (option for more)

Max Flag Channels

# **PAGE 2/3**

Technical Specifications	- Continued				
Data-logging continued					
Memory	USB Flash Drive (option)				
Log Rate Max	500Hz				
Engine Log	Yes				
Alarms Log	Yes				
Lap Times log	yes (optional)				
Performance Times log	yes (optional)				
Calculations					
Lap Times	Yes (with external option)				
Acceleration Performance	Yes (with external option)				
Engine Power & Torque	Yes (with external option)				
Math Channels	16 (option for more)				
Trip Meters	4				
Screen					
Туре	RGB TFT IPS wide temp				
Size	480 x 272 pixels				
Brightness	1000cd				
Refresh rate	50Hz				
Display glass	ARC high-efficiency broad- band anti-reflection				
	Danu anti-renection				
User Interface					
# of Pages	32				
Custom page design	yes				
Colour themes	yes				
	<i>y</i> • • • • • • • • • • • • • • • • • • •				
Electrical Data					
Supply Voltage Range	9-30V DC				
Current Consumption	max. 2A at 12V				
·					
<b>Operating Conditions</b>					
Temperature Range	-20 to +60 degC				
Physical					
Connectors	JAE MX47 Series 39 pins				
Dimensions mm	width: 125, height: 83.5,				
	depth 14/32mm				
Weight	270g				
Material	CNC machined aluminum				
Sealing / Ingress Protection	IP67 - dust tight, protected				
	against water immersion				

# Improvements vs discontinued SDM-300 / SDM-500

- Fully re-designed electronics and hardware
- More powerful processor with multi-core capacity
- Improved TFT display / better viewing angle
- Enhanced design / form factor
- Weather and dust protection (IP67)
- Fully configurable RGB LED lights
- Automotive grade sealed connector with more pins
- Significantly more default inputs and outputs
- Enhanced 25Hz GNSS module (DLG / option)
- 100Hz Inertial Measurement Unit (DLG / option)
- Improved graphics and customisation
- Enhanced electrical protection

#### **Product Versions**

SDM-330-D	Display only				
SDM-330-DL	Display plus USB logging				
SDM-330-DLG	Display with USB logging and				
	ext. 25Hz GNSS module				

## **Upgrade options**

L-ULC	FW unlock for USB logging. Ap-
	plies to "D" version
G-ULC	External 25Hz GNSS kit (HW &
	FW). Applies to "DL" version.

## **Control Add-ons**

BLMKT-4K	4button weather sealed keypad
	with configurable CAN BUS
BLKM-PT	6button weather sealed with
	rotary controller

#### What's In The Box

Display	■ USB cable
■ JAE MX47 connector	■ USB stick (DL/DLG)
■ Pins /Plugs (32/10)	■ GNSS Kit (DLG)

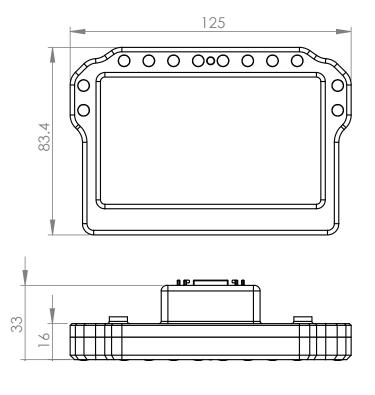
#### Software

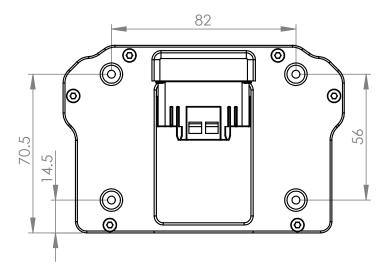
PLEX Device Manager V2	configuration	free
PLEX PDA-WIN	data analysis	free
PLEX PDA-WIN-PRO	data analysis	paid

# Indicative List of Compatible After Market ECU Brands & CAN Devices

Fully configurable CAN Receive & Transmit	MAGNETI MARELI
AIM	MAXX ECU
BLINK MARINE	MBE
BOSCH MOTORSPORT	MECTRONIK
CARROT	MEGASQUIRT
COSWORTH	MME
DTA	MOTEC
ECUMASTER	MSEL
EFI	PECTEL
ELETROMOTIVE	PRO EFI
EMERALD	RACEGRADE
EMTRON	RACELOGIC
E-RACE BLACK	SPECIALIST COMPONENTS
GEMS	SIMTEK
GRAYHILL	SYBELE
HALTECH	SYVECS
HONDATA	TEXENSE
HP ELETRONIC	TREMONDI
KMS	TRIJECT
LIFE RACING	XAP
LINK	

## **Technical Drawings / Dimensions / Mounting (in mm)**





#### ATTENTION - DISCLAIMER

©PLEX TUNING O.E. 2021 | The information contained in these documents is confidential, privileged and only for the information of the intended recipient and may not be used, published or redistributed without the prior written consent of Plex Tuning OE. Additionally, all information in these documents is subject to changes without prior notice.



### **PIN FUNCTIONS - Connector JAE MX47039SF1**

#	LABEL	DESCRIPTION	NOTES				
1	LIN RECOVERY	Lin bus Master / Recovery	Device boots in recovery mode when pin connected to ground				
2	AN1/DI1/FR1	Analog / Digital / Frequency input 0-5V	selectable pull-up 3K3 to +5V, FR trigger threshold 1.2V				
3	AN2/DI2/FR2	Analog / Digital / Frequency input 0-5V	selectable pull-up 3K3 to +5V, FR trigger threshold 1.2V				
4	AN3/DI3/FR3	Analog / Digital / Frequency input 0-5V	selectable pull-up 3K3 to +5V, FR trigger threshold 1.2V				
5	AN4/DI4/FR4	Analog / Digital / Frequency input 0-5V	selectable pull-up 3K3 to +5V, FR trigger threshold 1.2V				
6	DI9	Digital input	fixed 47K pull to 5V				
7	DI10	Digital input	fixed 47K pull to 5V				
8	DI11	Digital input	fixed 47K pull to 5V				
9	DI12	Digital input	fixed 47K pull to 5V				
10	USB DN	USB data negative signal	for PC communications and USB Flash logging				
11	DI13	Digital input	fixed 47K pull to 5V				
12	DI14	Digital input	fixed 47K pull to 5V				
15	AN5/DI5/FR5	Analog / Digital / Frequency input 0-16V	FR trigger threshold adj, fixed16K pull down, selectable 330R pull-down				
16	AN6/DI6/FR6	Analog / Digital / Frequency input 0-16V	FR trigger threshold adj, fixed 16Kpull down, selectable 330R pull-down				
17	AN7/DI7/FR7	Analog / Digital / Frequency input 0-16V	FR trigger threshold adj, fixed 16Kpull down, selectable 330R pull-down				
18	AN8/DI8/FR8	Analog / Digital / Frequency input 0-16V	FR trigger threshold adj,fixed 16K pull down,selectable 330R pull-down				
19	CAN1HI	CAN Port 1 High signal	250kbit – 1.333Mbit speed, selectable 120R termination				
20	CAN2HI RS232RX	CAN Port 2 High signal / RS232 Port Rx input	250kbit – 1.333Mbit speed, selectable 120R termination				
23	USB DP	USB data positive signal	for PC communications and USB Flash logging				
24	DI15	Digital input	fixed 47K pull to 5V				
25	DI16	Digital input	fixed 47K pull to 5V				
27	+8-24V	Power supply for the device	Connect to a switched +8-24V power source,3A max				
28	GND	Ground supply the device	Connect to chassis/engine ground				
29	SGND	Ground supply output for sensors	Protected from overcurrent				
30	+5V SENS	+5V supply output for sensors	protected, max 250mA				
32	CAN1LO	CAN Port 1 Low signal	250kbit – 1.333Mbit speed, selectable 120R termination				
33	CAN2LO RS232TX	CAN Port 2 Low signal / RS232 Port Tx output	250kbit – 1.333Mbit speed, selectable 120R termination				
36	USB +5V	USB +5V	protected, max 250mA				
37	USB GND	USB ground					
38	AUX1 HS	Auxiliary output – High Side	ON/OFF or PWM, sources current from pin 27, 1A max current				
39	AUX2 HS	Auxiliary output – High Side	ON/OFF or PWM, sources current from pin 27, 1A max current				
13 14 21 22 26 31 34 35	NC	UNUSED - DO NOT CONNECT					

# **CONNECTOR WIRE SIDE VIEW (REAR)**

							1		Í					_
13	NC	DI14	DI13	USB DN	DI12	DI11	DI10	DI9	AN4/DI4/FR4	AN3/DI3/FR3	AN2/DI2/FR2	AN1/DI1/FR1	LIN RECOVERY	1
26	NC	DI16	DI15	USB DP	NC	NC	CAN2HI RS232RX	CAN1HI	AN8/DI8/FR8	AN7/DI7/FR7	AN6/DI6/FR6	AN5/DI5/FR5	NC	14
39	AUX2 HS	AUX1 HS	USB GND	USB +5V	NC	NC	CAN2LO RS232TX	CAN1LO	NC	+5V SENS	SGND	GND	+8-24V	27

#### CONNECTOR PART NUMBERS

LOOM CONNECTOR JAE MX47039SF1
WIRE PINS JAE M47S65H2FA
DUMMY PLUGS JAE M120-55780

#### ATTENTION - DISCLAIMER

©PLEX TUNING O.E. 2021 | The information contained in these documents is confidential, privileged and only for the information of the intended recipient and may not be used, published or redistributed without the prior written consent of Plex Tuning OE. Additionally, all information in these documents is subject to changes without prior notice.

