



DSEM810 – 10寸可编程显示器 (有按键/无按键版)

Part Numbers: M810-01, M810-02, M810-03, M810-04



综览

DSEM810 是一款10 英寸可编程显示器，专为车辆和非公路机械而设计。DSEM810 可作为独立产品或大型系统的一部分使用，为用户提供出色的灵活性。CAN接口 (CANopen、SAE-J1939 和原始 CAN) 允许可配置的板载 I/O，通过一系列设备进行补充，包括 DSEM64X 可编程控制器或支持 CAN 的分布式 I/O，如 DSE2160 或 DSE2170。

两个独立的 CAN 接口和板载以太网，提供了与一系列外部设备连接的灵活性。面板安装和 RAM 安装选项均可用，以及横向或纵向使用选项。DSEM810 使用 CODESYS 3.5 或 Qt 6 进行配置。

关键特征

- 为严苛环境开发的10.1寸光学绑定彩色显示器。
- 日光可见，防眩光显示器 (1000 cd/m² (nit))
- 电容触摸屏，支持带手套操作
- 带GPU的NXP i.MX 8 DualXPlus 处理器
- 8 GB Flash存储，1 GB RAM 运行内存。
- 4 输出 (数字 / PWM)。
- 4 输入 (数字, 电阻, 电压, 电流, 频率)
- 按键版有12个带背光的按键。
- 2 路独立CAN 接口 (J1939, CANopen and Raw CAN)
- 实时时钟 (RTC)
- 以太网, 包含 CODESYS Modbus TCP 主站 (client)
- 音频输出
- 2 路模拟摄像头输入, TCP/IP 摄像头
- Web 浏览器
- PDF 播放器
- Movie 播放器
- USB 用于固件 / 应用 更新，以及关于文件/ 数据记录的额外存储空间

产品版本

- M810-01 - CODESYS (带按键)
- M810-02 - CODESYS (无按键)
- M810-03 - Qt (带按键)
- M810-04 - Qt (无按键)

Product Documentation

- 057-357 – DSEM810操作手册
- 057-358 – DSEM810 CODESYS手册
- 057-359 - DSEM810 Qt 手册



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 T: +44 (0) 1723 890099
 E: sales@deepseaelectronics.com
 W: www.deepseaelectronics.com

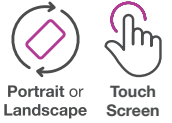
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规格	
DC Supply	
Continuous Voltage Rating	8 V DC to 32 V DC 稳定电压
Maximum Operating Current	< 1500 mA at 12 V and 24 V 无外部负载
显示	
尺寸	10.1" TFT, 1280 x 800 resolution 24 bit colour. 光学绑定
亮度	1000 cd/m ² (nit)
输入	
Type	电压 0 V to 5 V, 0 V to 10 V, 0 V to 32 V 电流 0 mA to 20 mA 比率 电阻 0 Ω to 3 kΩ 频率 5 Hz to 30 kHz 数字 正极 / 负极
输出	
Type	数字 - 高边 / 低边 PWM - 高边 0 Hz to 250 Hz
处理器	
iMX8DualXPlus Microcontroller	2 x ARM Cortex A35 1 x ARM Cortex M4
Speed	1.2 GHz 264 MHz
Flash	4.6 GB 应用程序可用 8 GB total
RAM	1 GB

Product Documentation

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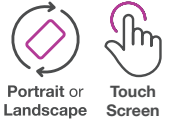


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规格	
接口 / 通讯	
CAN 1 and 2	CAN Interfaces 2.0 A/B, ISO11898 50 kbits/s... 1 Mbit/s CANopen, SAE J1939 or Raw CAN
Ethernet	10 Mbit/s / 100 Mbit/s 双工 CODESYS Modbus TCP Client
USB	USB host 2.0 (480 Mbit/s)
WIFI	WIFI 2.4 GHz IEEE 801.11 b/g/n
温度	
工作温度	-30 °C to +65 °C / -22 °F to +149 °F
存储温度	-40 °C to +80 °C / -40 °F to +176 °F
尺寸	
Overall (W x H x D) 带按键	281 mm x 181 mm x 65.5 mm / 11.0" x 7.12" x 2.58"
Overall (W x H x D) 无按键	281 mm x 181 mm x 61.5mm / 11.0" x 7.12" x 2.42"
Panel Cut-Out (W x H)	265 mm x 165 mm (R 12 mm) / 10.2" x 6.5" (R 0.5")
最大面板厚度	6 mm / 0.2"
RAM Mountable	AMPS hole pattern

相关产品		
可编程控制器		
DSEM640	Programmable Controller (68 I/O)	M640-01
DSEM643	Programmable Controller (34 I/O)	M643-01
扩展设备		
DSE2160	CAN Input / Output Expansion Module	2160-01
DSE2170	CAN RTD / Thermocouple / Analogue Output Expansion Module	2170-01
配件		
DSEM810 Wiring Harness 1.2 m (3' 11")		016-189
DSEM810 Connector Set (including pins)		007-1178
Panel Mount Kit		100-413-01
RAM Mount Kit		100-414-01
Ethernet Cable		016-160
USB Cable		016-161

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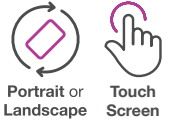
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环境测试标准	
CE Marking	
EN61000-6-2	Electromagnetic compatibility (EMC) noise immunity
EN61000-6-4	Electromagnetic compatibility (EMC) emission standard
BS EN 61010: 2010 +A1: 2019	Safety of information technology equipment, general requirements
E11	
UN/ECE-R10.06	E11
水和灰尘	
IEC60529	IP67 / NEMA6
盐雾	
BS EN 60068-2-52	Test Kb - Salt Mist Cyclic (Sodium Chloride Solution) Severity 3 One test cycle consisting of: Salt mist temperature: +15 °C to +35 °C Spray period: 2 hours Followed by humidity storage period: 20 - 22 hours at 93+2-3% rh and +40 °C ± 2 °C Four test cycles (as above) to be applied followed by a Storage Period: 3 days @ 45-55% rh and +23°C ±2°C
机械测试	
EN 60068-2-64	Vibration Random Freq range: 10 Hz to 350 Hz
ISO 16750-3	Test VII; vibration Random mounting Location: vehicle body
EN 60068-2-27	Mechanical shock Shock pulse shape: Half sine Amplitude: 50 g Duration: 11 ms Number of shocks: 3 in each direction of each axis (9 in total of each duration)
EN 60068-2-27	Mechanical shock Shock pulse shape: Half sine Amplitude: 50 g Duration: 6 ms Number of shocks: 3 in each direction of each axis (9 in total of each duration)
ISO 16750-3	Bumps Amplitude: 30 g Duration: 6 ms; 24,000 shocks
负载转储 Load Dump	
ISO 16750-2	151 V (Ri 1 Ω) 202 V (Ri 8 Ω)

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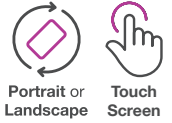


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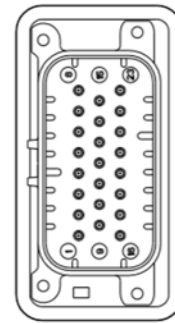
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Connector A	
Pin	Description
1	ECU 供电正极 +ve
2	音频输出正极 +ve
3	点火信号正极 +ve (15)
4	摄像头1 信号正极 +ve
5	I输入负极 -ve
6	编程使能
7	输入 1
8	输入 2
9	ECU 供电负极 -ve
10	音频输出负极 -ve
11	CAN 1 H
12	CAN 1 L
13	摄像头 2 信号正极 +ve
14	摄像头 1 & 2 信号负极 -ve
15	I输入 3
16	参考电压输出
17	输出 1
18	CAN 2 H
19	CAN 2 L
20	输出 2
21	输出 3
22	输出 4
23	输入 4

Connector Diagrams
Connector A

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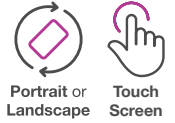
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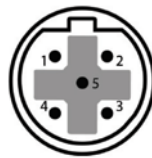
Ethernet - M12 'D' Coded	
Pin	Description
1	Tx+
2	Rx+
3	Tx-
4	Rx-
USB Host	
Pin	Description
1	+5 V DC
2	Data -
3	Data +
4	0 V
5	Shield
WIFI	
RF - SMA Female	Outside thread, female centre pin. (Suits antenna with SMA Male connector)

Connector Diagrams

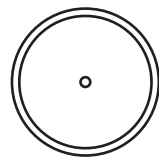
Ethernet



USB Host



WIFI



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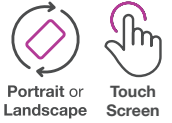
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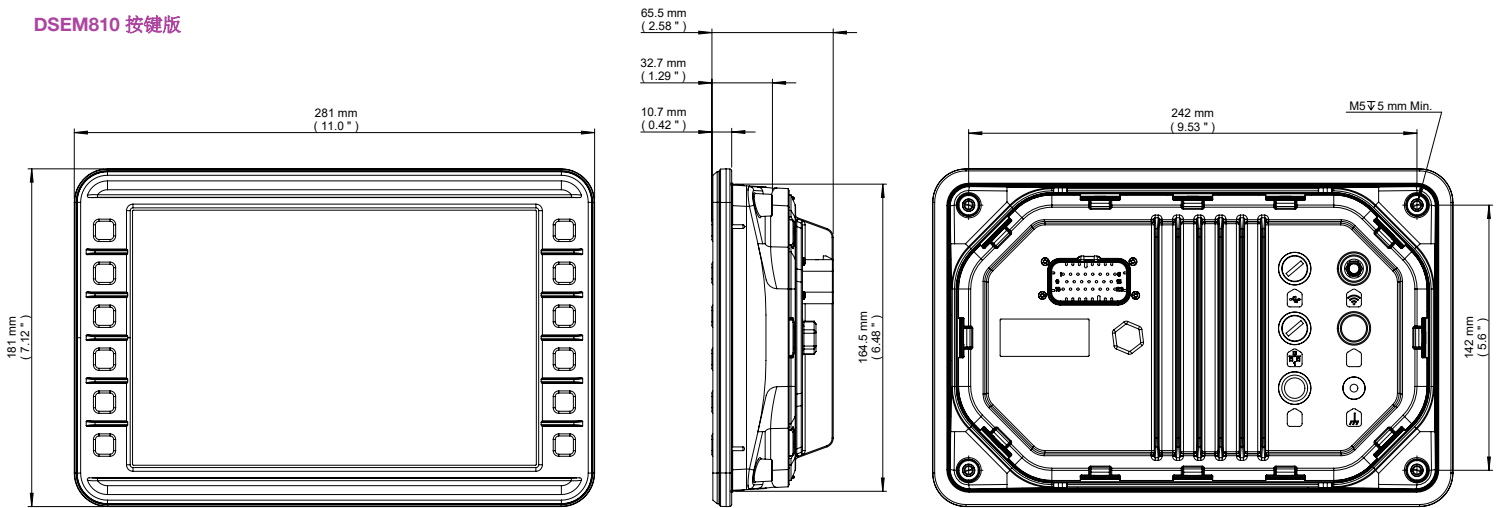
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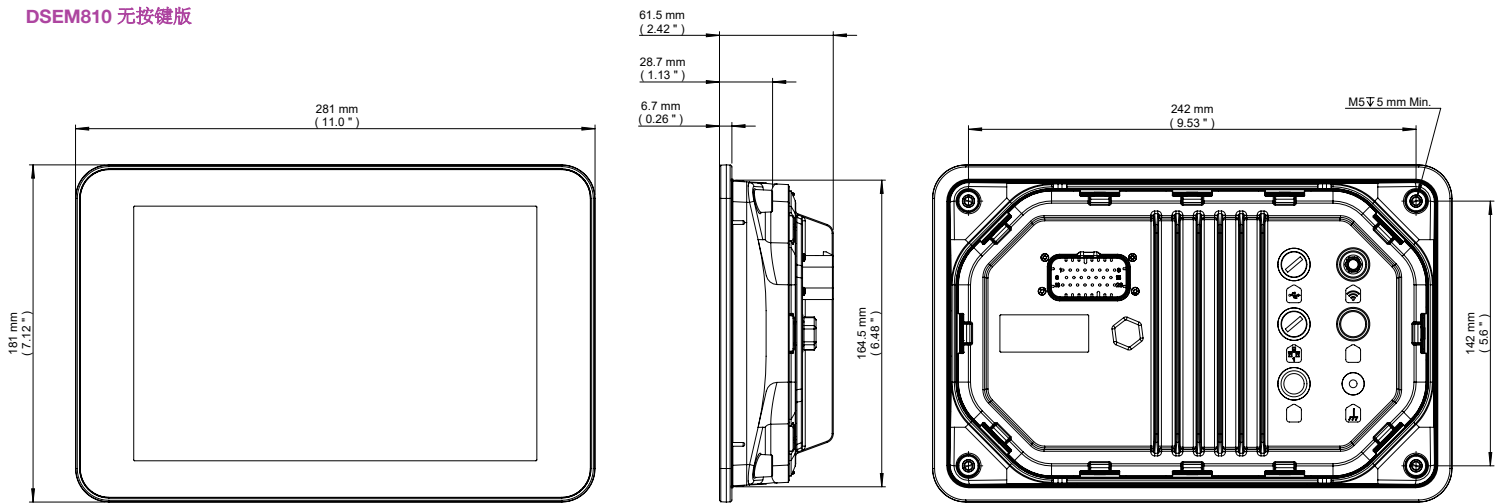


Technical Drawing

DSEM810 按键版



DSEM810 无按键版



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