516CANDI Series CAN Display Interface Preliminary Datasheet

The 516CANDI (CAN Display Interface) is a CAN based 2.4" 65K color 320 x 240 TFT LCD with touchscreen. The 516CANDI can support multiple CAN protocols including J1939 and CAN Open. The touchscreen is capable of determining touch pressure and motion tracking for simple gesture based controls. Screens are designed using an intuitive GUI builder that leverages simple HTML and scripting support for implementing dynamic customer interfaces.

The 516CANDI is housed in a complimentary enclosure that allows easy integration with additional HMI Systems rocker switch configurations. It is the same dimensions as a 4 way rocker switch and can be linked together with rocker switches to provide a single common interface and aesthetic.

The 516CANDI includes up to 2 GB of available memory stored on a commercially available micro SD card. All program application data and GUI components are contained on the SD card. This allows immediate field upgrades of critical software components simply by replacing the card without any specialized training or equipment. The available memory and file OS can support thousands of pages of information.



The powerful HTML and scripting capabilities combined with the high storage capacity can dramatically change customer experiences. The diagnostics monitoring of the in vehicle CAN systems can be linked to troubleshooting guides straight from the user manual that then walks the customer through solving any challenge right from their dash with as many helpful diagrams or in vehicle images as might be required.

design specifications

- Shock: Mil Std 202G method 213B Test Condition C
- Vibration: Mil Std 202G method 204D Test Condition B
- Ingress Protection: IP63 Water sprayed in all directions to user surface
- PCB characteristics: UL94V-0
- Salt spray: ASTM B117
- EMI Testing: 2004/104/EC (or SAE J1113 equivalent)
 - Section 6.5 Broadband Radiated Emissions
 - Section 6.6 Narrowband Radiated Emissions
 - Section 6.7 Immunity to Electromagnetic Radiation
 - Section 6.8 Immunity to Transient along supply lines
 - Section 6.9 Conducted Transient Emissions

electrical specifications

Description	Minimum	Nominal	Maximum
Operating Voltage	10 VDC	12 / 24 VDC	48 VDC
Operating Current	-	120 mA @ 12VDC	-

physical specifications

Front Bezel	UL 94 V-0 rated Polycarbonate	
Back Cover	UL 94 V-0 rated Polycarbonate	
Operating Temperature	-20°C to 70°C	
Storage Temperature	-30°C to 85°C	
Operating Humidity	Up to 95% condensing	
Weight	100 grams	
Display brightness	300 cd/m2 typ.	
Contrast Ratio	800:1 typ.	
Viewing Angle	-80/80 vertical - 80/80 horizontal	
LED Backlight Life	> 50,000 hours	

Wiring Specifications

Wiring	V+(red wire)	GND (black wire)	CANL (green wire)	CANH (yellow wire)
Inputs & Outputs	Input	Input	1/0	I/O
Description	Power Input	Ground	CAN Data Bus L	CAN Data Bus H
Recommended Wire Gauge	18AWG	18AWG	18AWG	18AWG

Mounting Specifications

In order to mount the 516CANDI, the panel opening cutout needs to fall within the minimum and maximum allowances. Recommended cutout is: length of 4.20" (106.68 mm) and a width of 1.90" (48.26mm). Maximum panel thickness is 0.35" (8.89mm), for assembly to lock into place. An optional gasket can be added to further protect mounting location from intrusion of dust or moisture. Gasket seals between frame and mounting surface.

cutout template 1:1 printout



mechanical dimensional views (not to scale)









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