

541CEI Preliminary Datasheet



The 541CEI (CAN Eight Input) is a CAN (J1939) based eight channel digital input module that will read up to 8 multi configurable digital inputs and convert them to a user definable CAN message. The compatible signals are active high, active low, and dry contact. All eight channels can be individually configured through software to detect any of the compatible levels. Both a positive and negative reference are required for the active high and active low detection. If dry contacts are used the positive reference provides a slight biasing for the input and the other side should be wired to the appropriate inputs return. All inputs are optically isolated and over-current protected.

The 541CEI is housed in a sealed Deutsch enclosure that allows for it to be mounted in extreme environments and withstand those conditions. It uses 2 of the DTM13 style polarized connectors to provide internal power and external connections to all sensor options.

The software is integrated with the HMI CAN Create family. This allows user definable messages that can packetize multiple readings into a single message.

Design Specifications

- Shock: Mil Std 202G method 213B Test Condition C
- Vibration: Mil Std 202G method 204D Test Condition B
- Ingress Protection : IP66
- PCB Characteristics : UL94V-0
- Salt Spray: ASTM B117
- J1113 Transient / Immunity Protections
- Load Dump Pulse 5B (50V peak)

Electrical Specifications

Description	Minimum	Nominal	Maximum
Operating Voltage	10 VDC	12 / 24 VDC	48 VDC
Operating Current	15 mA @ 32 VDC	-	30 mA @ 10 VDC
(internal only)			
Digital Input	0 VDC	-	32 VDC
Voltage			
Digital Input	0 mA	5mA (single	500mA (all
Current		channel)	channels)

Physical Specifications

Operating Temperature	-40°C to 80°C
Storage Temperature	-55°C to 85°C
Operating Humidity	up to 100% condensing