

521CRED Series CAN Rotary Encoder / Display

The 521CRED is a CAN based multi-channel rotary encoder that will allow the user to adjust an analog value with the encoder while monitoring its update on the 4 digit display. Three switches on the overlay allow for incrementing or decrementing the current channel, and locking out any adjustments from being made. The rotary encoder allows 360 degrees of free spinning motion and uses the acceleration of the spin to quickly reach the desired value range then fine tune the exact value required.

The 521CRED is housed in a complimentary enclosure that allows easy integration with additional rocker switch configurations. The overlay prevents water intrusion to the housing and can be silk-screened to meet customer aesthetics.

The seven segment display of the 521CRED can be dimmed for night vision and can be configured to use the desired precision (thousandths, hundredths, tenths, or ones). When not in use the display can be shut down to reduce power consumption. An internal sleep mode can also be activated which will enable the module to consume just enough power to monitor the bus for activity and wake up when necessary.



features

- Supports up to 4 separate values transmitted as a single CAN message
- Physically links together with 4-way rocker switches to provide a single common interface
- 4-digit LED display, dimmable
- Three switches and rotary encoder for quick adjustments

design specifications

- Shock: MIL-STD-202G method 213B, test condition C
- Vibration: MIL-STD-202G method 204D, test condition B
- Ingress Protection: IP63
- PCB characteristics: UL94V-0
- Salt Spray: ASTM B117
- 500,000 cycles operation

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mounting specifications

A rectangular hole the size of the keep out area must be cut from mounting surface. The keep out area is 4.15" x 1.90" (105.41mm x 48.26mm). Maximum panel thickness is 0.35" (8.89mm), for assembly to lock into place. In order to mount the 521CRED, the panel opening cutout needs to fall within the minimum and maximum allowances.

electrical specifications

| Description | Minimum | Nominal | Maximum |
|--------------------|---------------|-------------|-----------------|
| Operating Voltage | 10 VDC | 12 / 24 VDC | 32 VDC |
| Operating Current | 75 mA @ 32VDC | — | 300 mA @ 10 VDC |
| Sleep Mode Current | 2 mA | — | — |

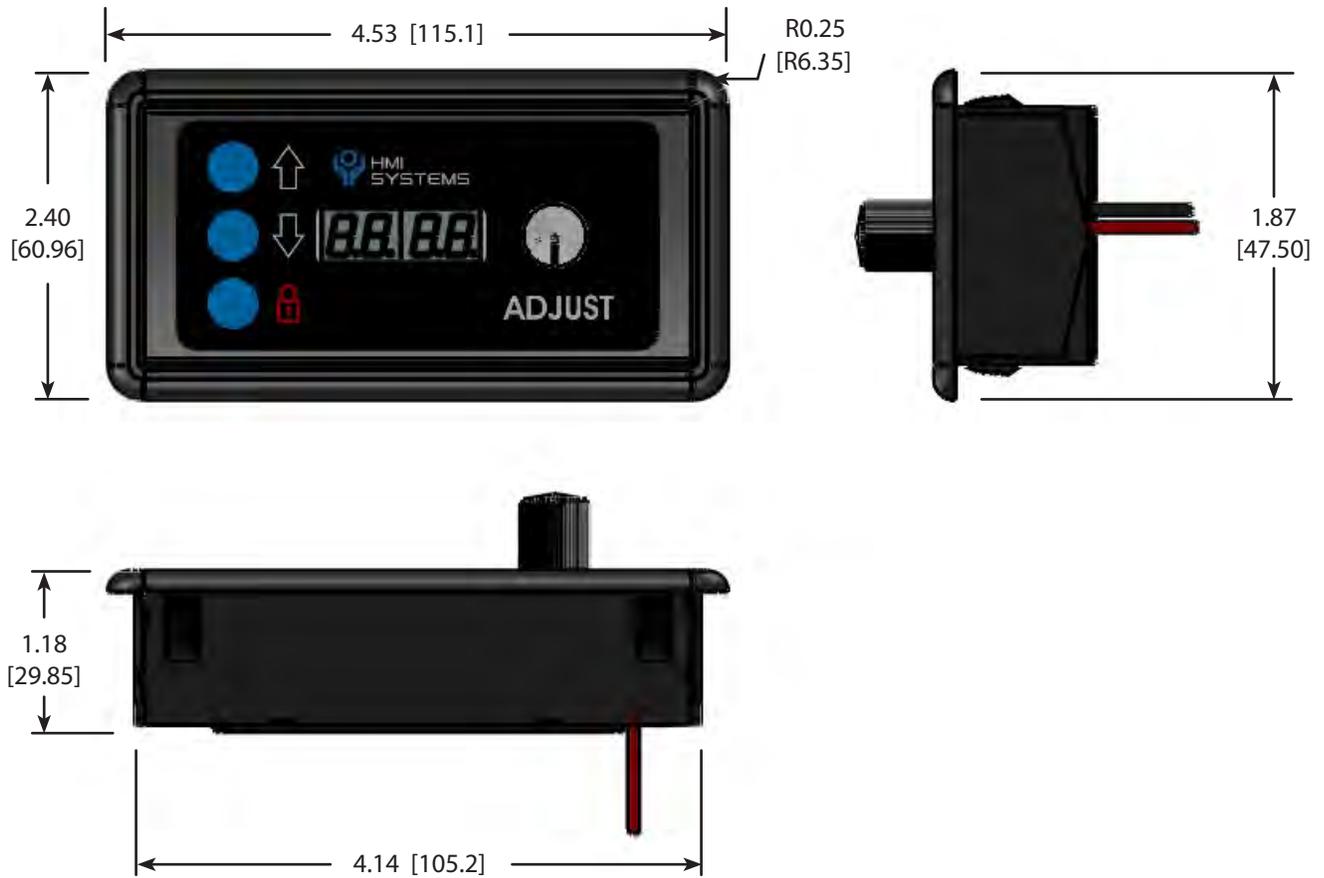
physical specifications

| | |
|--------------------------|--------------------------------------|
| Front Bezel + Back Cover | UL 94 V-0 rated, approved molded ABS |
| Front Overlay | Polyester EBG180 |
| Operating Temperature | -40°C to 60°C |
| Storage Temperature | -55°C to 85°C |
| Operating Humidity | up to 95% condensing |
| Weight | 100 grams |

ordering information

| Description | Part Number |
|------------------------------|-------------|
| CAN Rotary Encoder / Display | 521CRED |

dimensional mounting diagram



physical connectivity

The 521CRED is a module that can be used as a stand alone item in the system, or it can be physically joined with other modules (like the 482CRM or 524AM) by sliding them together to create a chain of modules, reducing the necessary overall panel space requirements as well as improving overall panel aesthetics.



524AM

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482CRM

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521CRED



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