610CRM

SERIES

MULTICOLOUR LED CAN ROCKER MODULE

OVERVIEW

The 610CRM series is a programmable multicolour LED rocker module, designed to operate within a Controller Area Network (CAN).

FEATURES

- The 610CRM evolutionary model builds on the innovations of its 482CRM predecessor allowing for even more customisation of the indicators and support for many different protocols or even user scripted behaviours.
- Via backwards compatible configuration software each LED can be configured to dynamically adjust the colour based on data from external devices.
- The 610CRM utilises a patented system of optical interrupters to create a switch output, which means no electrical contacts within the switch. The 610CRM provides interchangeable CAMs supporting the following configurations:

  - 1 & 2 Position Momentary
  - 2 & 3 Position Stationary
  - 2 Position Momentary / 1 Position Stationary

These CAMs are designed on a simple snap in platform that allows for easy and inexpensive assemblies and modifications.
In addition, switches greater than 9 banks can be combined by dovetailing multiple units together.

INTELLIGENT POWER

STANDARD FEATURES

- LED Colour Configuration from 24 bit colour palette
- Interchangeable CAMs create different switch functions
- Laser-etched actuators (customer specified legends)
- Rocker module uses optical interrupters to eliminate contacts that can wear out over time
- Panel assembly is water proof
- Free configuration software with multiple firmware options to tackle any protocol
- Adjustable bank size between 3 and 9 positions
- Auxiliary I/O capabilities can be added by use of single position expansion modules expanding the total size by one additional position but requires a stationary actuator that will not move.
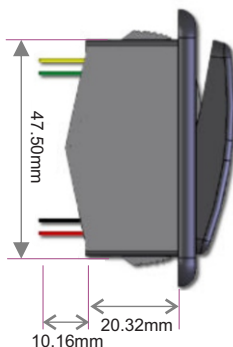- Switch banks greater than 9 positions can be combined by dovetailing multiple units together.

MECHANICAL

Housing	Ul94 V-0 Rated Polycarbonate
CAM, ARM Housing	Ul94 V-0 Rated Polycarbonate
Arm Spring	SUS304
Actuator	Lexan laser etched with Clear Coat
Actuator Guard	Ul94 V-0 Rated Polycarbonate
Mechanical Shock	ISO 16750-3 Sec 4.2.2 50G 1/2 sine 6 mS 10 pulses
Vibration	ISO 16750-3 Sec 4.1.2.8 Text VIII 8 Hrs each ax
Endurance	Tested to 250,000 actuations

ELECTRICAL

Operating Voltage	12-24VDC Nominal 7-32VDC
Operating Current	Min: 85mA Max: 550mA
Communication Bus	CAN (J1939)

DIMENSIONAL DRAWING*

DESIGN SPECIFICATIONS

- EMC: CISPR 25 Radiated & Conducted Emissions
- EFT: ISO 7637-2 Electrical Disturbances
- EMI: ISO 11452-2 ALSE / ISO 11452-4 BCI
- ESD: ISO 10605 8 kV contact / 15 kV air

PHYSICAL SPECIFICATIONS

Visible Lighting (Without actuator installed)	Red	620-630nm Wavelength
	Green	520-530nm Wavelength
	Blue	460-470nm Wavelength

ENVIRONMENTAL

Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Thermal Cycling	ISO 16750-4 240 Hr / 8 Hr Cycle
Operating Humidity	0 to 100% (Condensing)
Salt Spray	ASTMB117-11 300 Hrs continuous
UV	UVB 400 Hrs
Flammability	PCB UL94V-0
Moisture Resistance	IP67

OTHER FEATURES

Size MM	89.66 x 60.96 x 36.58
Weight (in position)	170g

MOUNTING SPECIFICATIONS

In order to mount the 610CRM, the panel opening cutout needs to fall within the minimum & maximum allowances, see the 3-switch *dimensional drawing to determine:

- Recommended Hole Cutout: L: 81.79mm / W: 48.26mm
- Each Additional Unit Add 25.4mm to length
- Maximum Panel Thickness: 8.89mm for Rocker Switch assembly to lock in place.

WIRING SPECIFICATIONS

Function / Wire Colour	Inputs/Outputs	Description	Recommended Wire Gauge
V+ (RED)	INPUT	POWER INPUT	18AWG
GND (BLACK)	INPUT	GROUND	18AWG
CAN L (GREEN)	I/O	CAN DATA bus L	18AWG
CAN H (YELLOW)	I/O	CAN DATA bus H	18AWG

* Drawings are NOT to Scale

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