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# KEYPAD MODULE

## KPM-R21



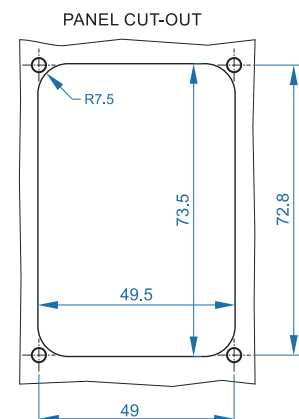
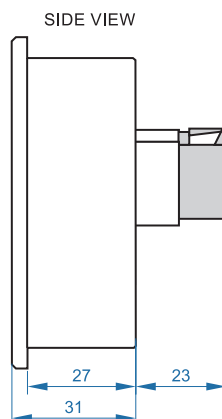
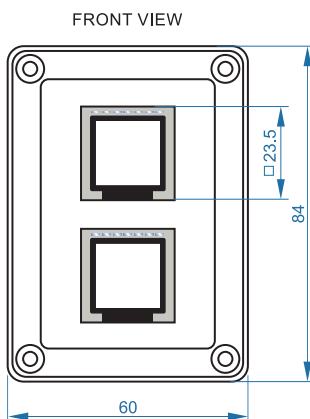
Icons shown on this keypad are for visual demonstration only.

### Features and Benefits

- 1 White Backlit With Red Led Signal Indicator
- 2 Freely Selectable Icons
- 3 Can Bus Datalink
- 4 Super Bright Leds, Wide Viewing Angle
- 5 Integrated I/O Driver – Optional
- 6 Washable, Waterproof Aluminium Housing

Keypad module KPM-R21 uses two distinct keys, it is highly resistant to weather conditions and can survive extreme environments, what makes it perfect for installation outside or inside driver cabin. The keys are large, well-spaced and embossed, allowing a reliable pressure sensation with a tactile feedback even when wearing protective gloves. Each key has a large red LED signal indicator above the icon.

Type KPM-R210 has an integrated I/O controller with two low side power outputs and two inputs that can be useful if the keypad is used as a stand-alone device, not connected to the MMX system.



Keypad is user programmable. Each key can be configured to operate as a switch, push button or both as a special feature. Key label graphics are customizable, white backlit and coloured according to function groups for easy recognition. Unused keys can be screened off with a dark label.

Labels are inserted at the inner side of the front panel of the keypad. Several keypads located on different places can be connected over CAN BUS to collaborate. Keypad modules series KPM-R are a perfect solution in automotive, nautical, agriculture, utility vehicles and industrial sectors.

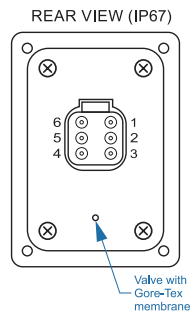
## Connection

CAN BUS MODULE

### CONNECTION Deutsch DT06-6S

#### PIN DESCRIPTION

<b>1</b>	BATTERY + (*15")
<b>2</b>	CAN L
<b>3</b>	CAN L, int. shorted to PIN 2
<b>4</b>	CAN H
<b>5</b>	CAN H, int. shorted to PIN 4
<b>6</b>	BATTERY -



STAND-ALONE MODULE WITH I/O

### CONNECTION Deutsch DT06-6S

#### PIN DESCRIPTION

<b>1</b>	BATTERY + (*15")
<b>2</b>	INPUT 1
<b>3</b>	OUTPUT 1
<b>4</b>	OUTPUT 2
<b>5</b>	INPUT 2
<b>6</b>	BATTERY -

## Specifications

POWER	
<b>Supply Voltage</b>	8-32 V DC
<b>Current</b>	0.1 A maximum, no outputs active
<b>Electrical Protection</b>	overvoltage, transients, reverse polarity, load dump
INTERFACES	
<b>CAN</b>	1 x CAN (only type without I/O driver)
<b>CAN termination</b>	120 ohm, DIP switch
ENVIRONMENT	
<b>IP Class (IEC529)</b>	IP67, waterproof
<b>EMC Conformity</b>	EN61000-6-2 noise immunity EN61000-6-4 radiation of interference
<b>Temperature Range</b>	storage -40° to +85°C (-40° to 185°F) operating -40° to +85°C (-40° to 185°F)
KEYS	
<b>Key LED</b>	white backlit
<b>Signal Indicator</b>	super bright red LED bar
<b>Icons</b>	freely selectable icons
<b>Key Design</b>	embossed keys with tactile feedback, operating force 8N
<b>Operating Life</b>	>250.000 cycles
<b>KEY dimension</b>	23.5 x 23.5 mm
SIZE AND WEIGHT	
<b>W x H x D</b>	60 x 84 x 33 mm without connector
<b>Weight</b>	0.21 kg

ENCLOSURE	
<b>Housing Material</b>	Aluminium
<b>Mounting</b>	in-dash, with 4 screws M3 or 3.5 mm (#8) tapping screws
<b>Connector</b>	Deutsch DT06-06S
I/O - Only version with integrated IO driver	
<b>Digital Input</b>	2 x active low level
<b>Digital Output</b>	2 x negative switching (low-side), max. 2 A
<b>Loads</b>	inductive, resistive
<b>Miscellaneous</b>	outputs not protected

## Ordering Codes

<b>KPM-R21</b>	Keypad module, 2 keys (2 rows x 1 column), white backlit with red signal indicator, CAN BUS datalink
<b>KPM-R210</b>	Keypad module, 2 keys (2 rows x 1 column), white backlit with red signal indicator, integrated I/O driver, no CAN BUS datalink
<b>For more options please contact the supplier.</b>	



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