

KEYPAD MODULE

KPM-C24 / KPM-C240



KEY FEATURES

- + **RGB Backlit Keys** with Customizable Icons
- + **Integrated I/O Driver** - Optional
- + **Ambient Light Sensor**, Buzzer
- + **Adjustable Key Brightness**
- + **CAN Bus** Communications
- + **Low Installation Depth**
- + **Waterproof** Aluminium Housing

Keypad module **KPM-C24** uses eight 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, wellspaced and “RIM” embossed, allowing a reliable pressure sensation with a tactile feedback even when wearing protective gloves. The keys can also be used in combination as warning lights.

Type KPM-C240 has an integrated I/O controller with high side power outputs and several inputs that can be useful if the keypad is used as a stand-alone device or as an extension of IO ports for controllers used in the MMX system.

Keypad is programmable. Each key can be configured to operate as a switch or push button. Corresponding key LED is fully configurable, colour and luminance are adjustable. Key label graphics are customizable and backlit 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-C are a perfect solution in automotive, nautical, agriculture, utility vehicles and industrial sectors.

SPECIFICATIONS

POWER

Supply Voltage	8-32 V DC
Current	100 mA maximum
Electrical Protection	overvoltage, transients, reverse polarity, load dump

INTERFACES

CAN	1 x CAN
CAN termination	120 ohm, DIP switch

ENVIRONMENT

IP Class (IEC529)	with terminal block front panel - IP67, back - IP51 with Deutsch DT06 complete IP67
EMC Conformity	EN61000-6-2 noise immunity EN61000-6-4 radiation of interference
Temperature Range	storage -40° to +85°C (-40° to 185°F) operating -40° to +85°C (-40° to 185°F)

KEYS

Key Backlite	RGB LED
Icons	customizable key icons
Brightness	individually adjustable key luminous intensity, ambient light sensor
Key Design	RIM-embossed keys with tactile feedback, dimension 18 x 18 mm
Operating Life	>250.000 cycles

ENCLOSURE

Housing Material	Aluminium
Mounting	in-dash with 4 screws M3 or 2.9 mm tapping screws
Connectors	Power Supply/Can 4 way terminal block or Automotive - Deutsch DT06-6 I/O 14 way Terminal Block

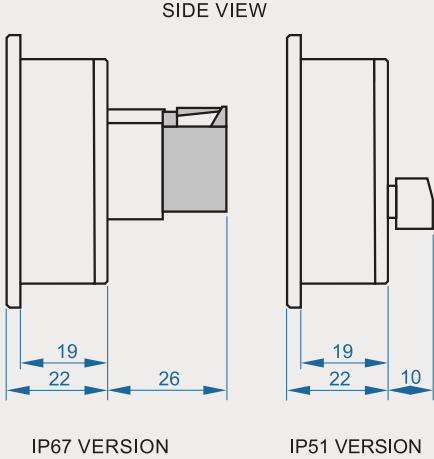
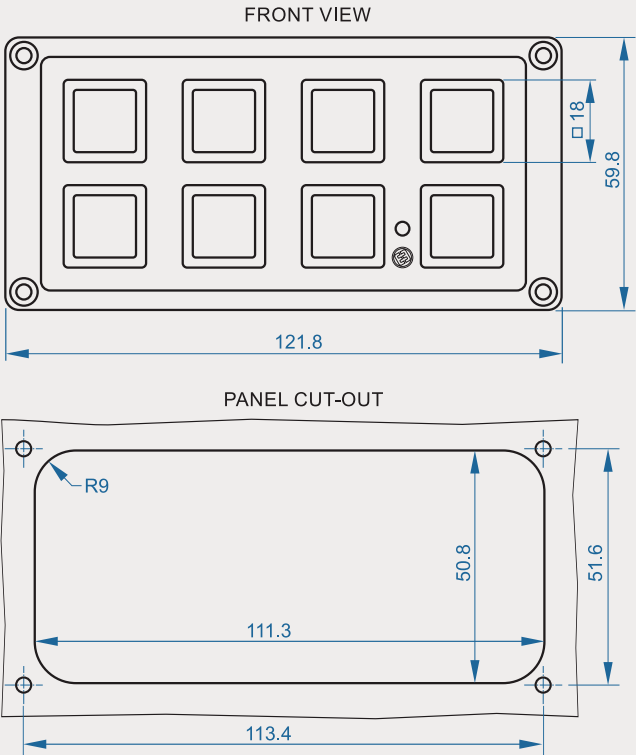
I/O - ONLY VERSION WITH INTEGRATED IO DRIVER

Digital Inputs	1x configurable active low/high levels via software, 0 .. Ub, integrated pull-up/down resistor, protected 3 x positive – active high, 0..Ub, switch on level >4.6V,integrated pull-down resistor
Digital Outputs	8x positive switching (high-side), max. 1.5 A, total output from the unit may not exceed 8 A
Loads	inductive, capacitive, resistive
Miscellaneous	protection from short circuit and overload

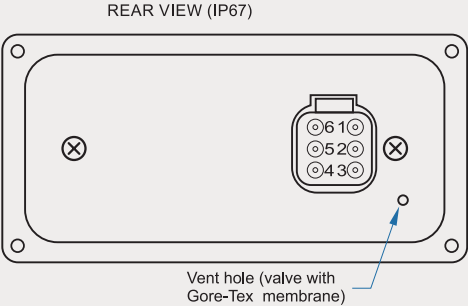
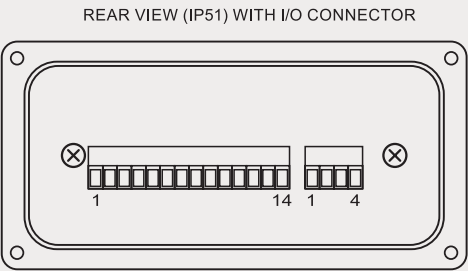
SIZE & WEIGHT

W x H x D	121.8 x 59.8 x 19 without connector
Weight	0.18 kg (IP51), 0.22 kg (IP67)

DIMENSIONS



CONNECTIONS



CONNECTION TERMINAL BLOCK 14 WAY

PIN	Description
1-8	HIGH-SIDE OUTPUT
9	INPUT - CONFIGURABLE
10-12	INPUT - POSITIVE
13-14	N/A

CONNECTION TERMINAL BLOCK 4 WAY

PIN	Description
1	CAN H
2	BATTERY -
3	BATTERY + ("15")
4	CAN L

CONNECTION DEUTSCH DT06-6S

PIN	Description
1	BATTERY + ("15")
2	CAN L
3	N/A
4	N/A
5	CAN H
6	BATTERY -

PRODUCT CODE

Ordering code example:

K	P	M	-	C	2	4	O				
		SIGNAL INDIC.		KEY CONFIGURATION		I/O		SEALING		SPECIAL FEATURES / APPLICATION	
		C: COLOR -RGB		24: 2-ROW, 4-COLUMN 26: 2-ROW, 6-COLUMN		O: I/O INTEGRATED		D: DEUTSCH CONN. IP67			