

# KEYPAD MODULE

KPM-C26 / KPM-C260



## KEY FEATURES

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

**Keypad module KPM-C26** uses twelve 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-C260 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

|                              |                                                      |
|------------------------------|------------------------------------------------------|
| <b>Supply Voltage</b>        | 8-32 V DC                                            |
| <b>Current</b>               | 130 mA maximum                                       |
| <b>Electrical Protection</b> | overvoltage, transients, reverse polarity, load dump |

### INTERFACES

|                        |                     |
|------------------------|---------------------|
| <b>CAN</b>             | 1 x CAN             |
| <b>CAN termination</b> | 120 ohm, DIP switch |

### ENVIRONMENT

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

### KEYS

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

### ENCLOSURE

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

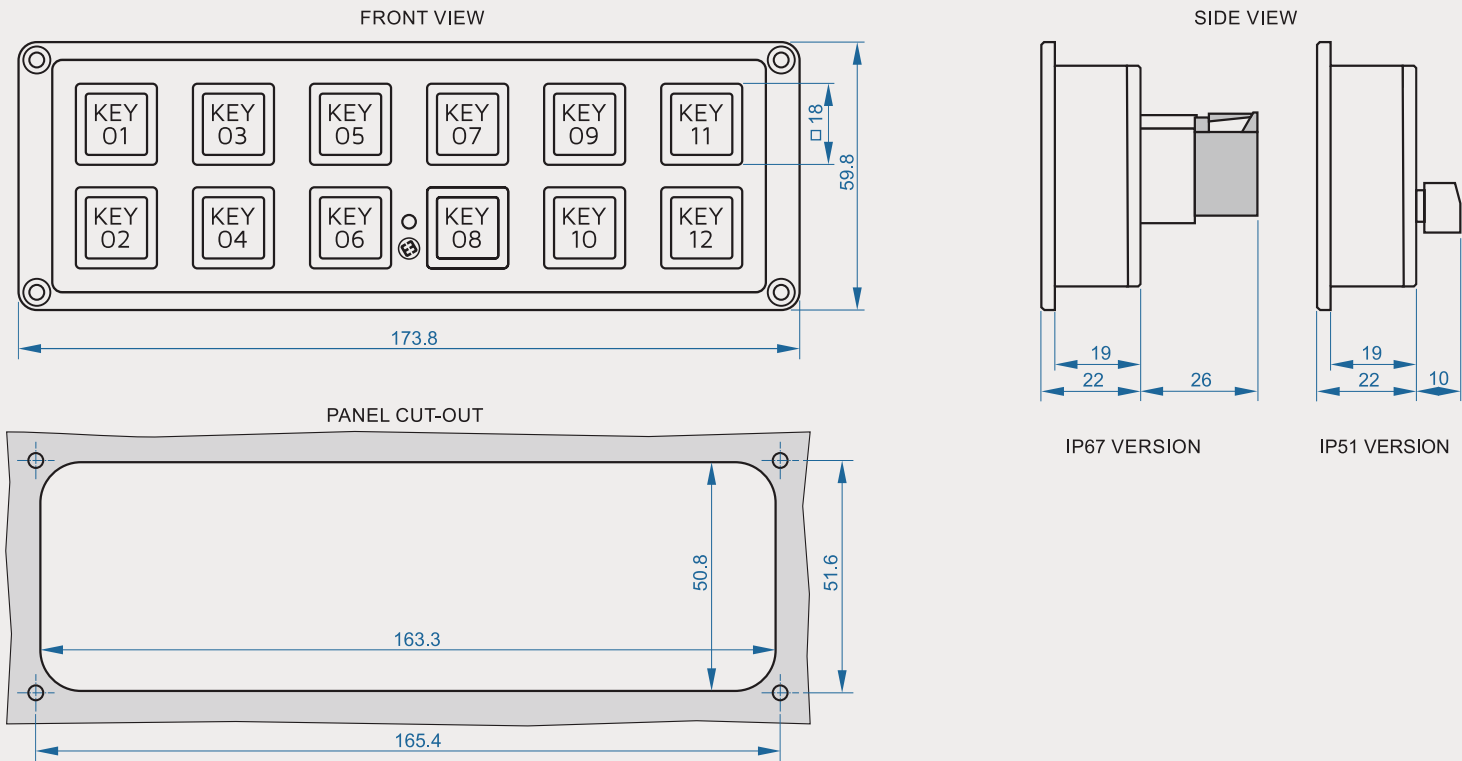
### I/O - ONLY VERSION WITH INTEGRATED IO DRIVER

|                        |                                                                                                                                                        |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Digital Inputs</b>  | 6x configurable active low/high levels via software, 0 .. Ub, switch on level >4.6V, switch off level <2V, integrated pull-up/down resistor, protected |
| <b>Digital Outputs</b> | 12 x positive switching (high-side), max. 1.5 A, total output from the unit may not exceed 8 A                                                         |
| <b>Loads</b>           | inductive, capacitive, resistive                                                                                                                       |
| <b>Miscellaneous</b>   | protection from short circuit and overload                                                                                                             |

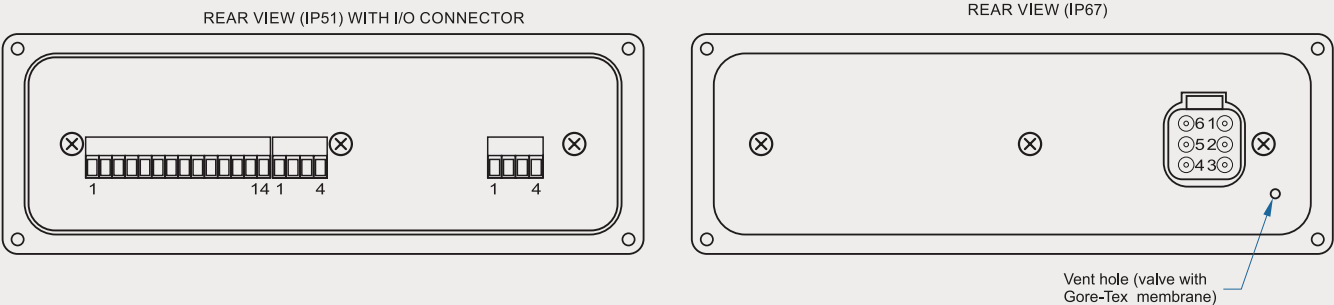
### SIZE & WEIGHT

|                  |                                     |
|------------------|-------------------------------------|
| <b>W x H x D</b> | 173.8 x 59.8 x 19 without connector |
| <b>Weight</b>    | 0.23 kg (IP51), 0.3 kg (IP67)       |

DIMENSIONS



CONNECTIONS



| CONNECTION TERMINAL BLOCK<br>14 WAY + 4 WAY |                      |
|---------------------------------------------|----------------------|
| PIN                                         | Description          |
| 1-12                                        | HIGH-SIDE OUTPUT     |
| 13-14                                       | INPUT - CONFIGURABLE |
| 1-4                                         | INPUT - POSITIVE     |

| 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 | 6                 | 0 |                       |  |                                |  |
|---|---|---------------|---|--------------------------------------------|---|-------------------|---|-----------------------|--|--------------------------------|--|
|   |   | SIGNAL INDIC. |   | KEY CONFIGURATION                          |   | I/O               |   | SEALING               |  | SPECIAL FEATURES / APPLICATION |  |
|   |   | C: COLOR -RGB |   | 24: 2-ROW, 4-COLUMN<br>26: 2-ROW, 6-COLUMN |   | O: I/O INTEGRATED |   | D: DEUTSCH CONN. IP67 |  |                                |  |