CAN KEYBOARD

Revision A

PRODUCT INFORMATION

CAN keyboard is an universal device that could be connected to PMU and EMU BLACK. All keys are back lighted in 3 colors GREEN, ORANGE and RED.
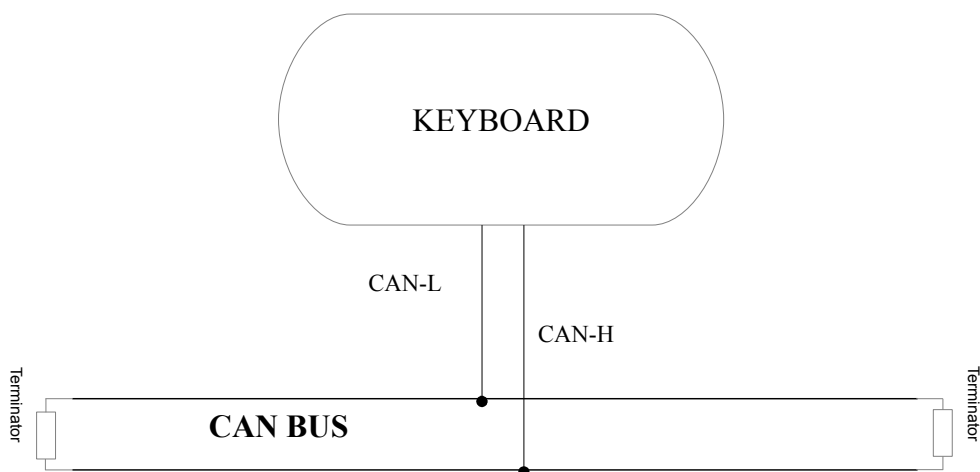
The color indicates current state of the key. Keys inserts are customizable (available icon list included in appendix A). Custom icons are available on request.

The keyboards are water proof (IP67).

CONNECTION

TERMINAL	Function
1 (blue)	CAN L
2 (white)	CAN H
3 (black)	Ground
4 (red)	Power (12-24V)

The mating connector type is Amphenol AT06-4S.

DEFAULT SETTINGS

Parameter	Default vale
CAN Speed	500kbps
CAN IDs	0x195 (BASE), 0x615 (RCV), 0x715(STATUS)

During the start up the device send out the one status message (0x715 by default).

For **EMU BLACK** only this CAN ID configuration is supported.

For **PMU** the base CAN ID could be in the range of 0x180 to 0x195.

Depends on base CAN ID, RCV and STATUS messages ID changes.

For example for base CAN ID 0x180, RCV = 0x600, STATUS = 0x700.

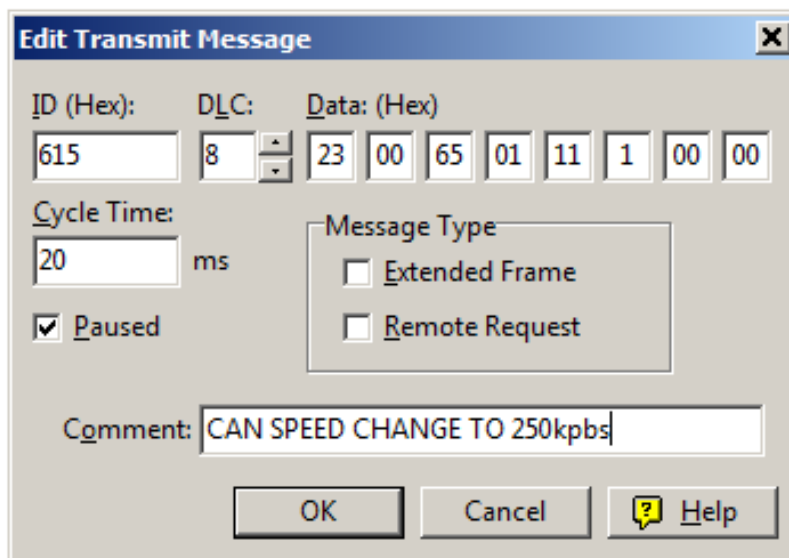To determine device base ID status message could be observed.

CAN SPEED CHANGE

To change CAN SPEED the following message should be sent:

CAN ID	DLC	0	1	2	3	4	5	6	7
RCV ID	8	0x23	0x0	0x65	0x01	0x11	SPD	0x0	0x0

SPD VALUE	BAUD RATE
0	125kbps
1	250kbps
2	500kbps

Sample message for keyboard with 0x195 BASE ID (from PCAN-View software) to change speed to 250kbps.

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BASE ID CHANGE

To change BASE ID the following message should be sent:

CAN ID	DLC	0	1	2	3	4	5	6	7
RCV ID	8	0x23	0x0	0x65	0x01	0x70	NEW ID	0x0	0x0

New BASE ID = 0x180 + NEW ID

New RCV ID = 0x600 + NEW ID

Sample message for keyboard with 0x195 BASE ID (from PCAN-View software) to change BASE ID to 0x194
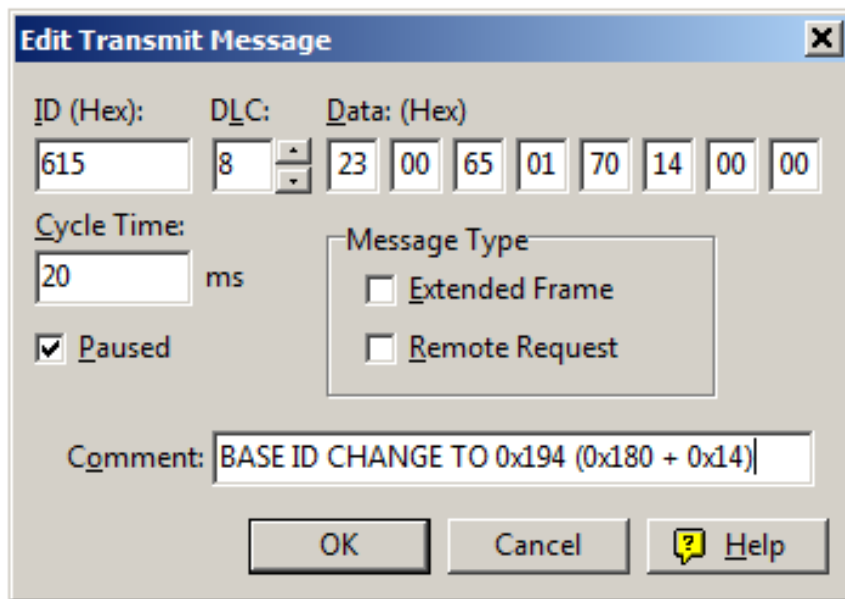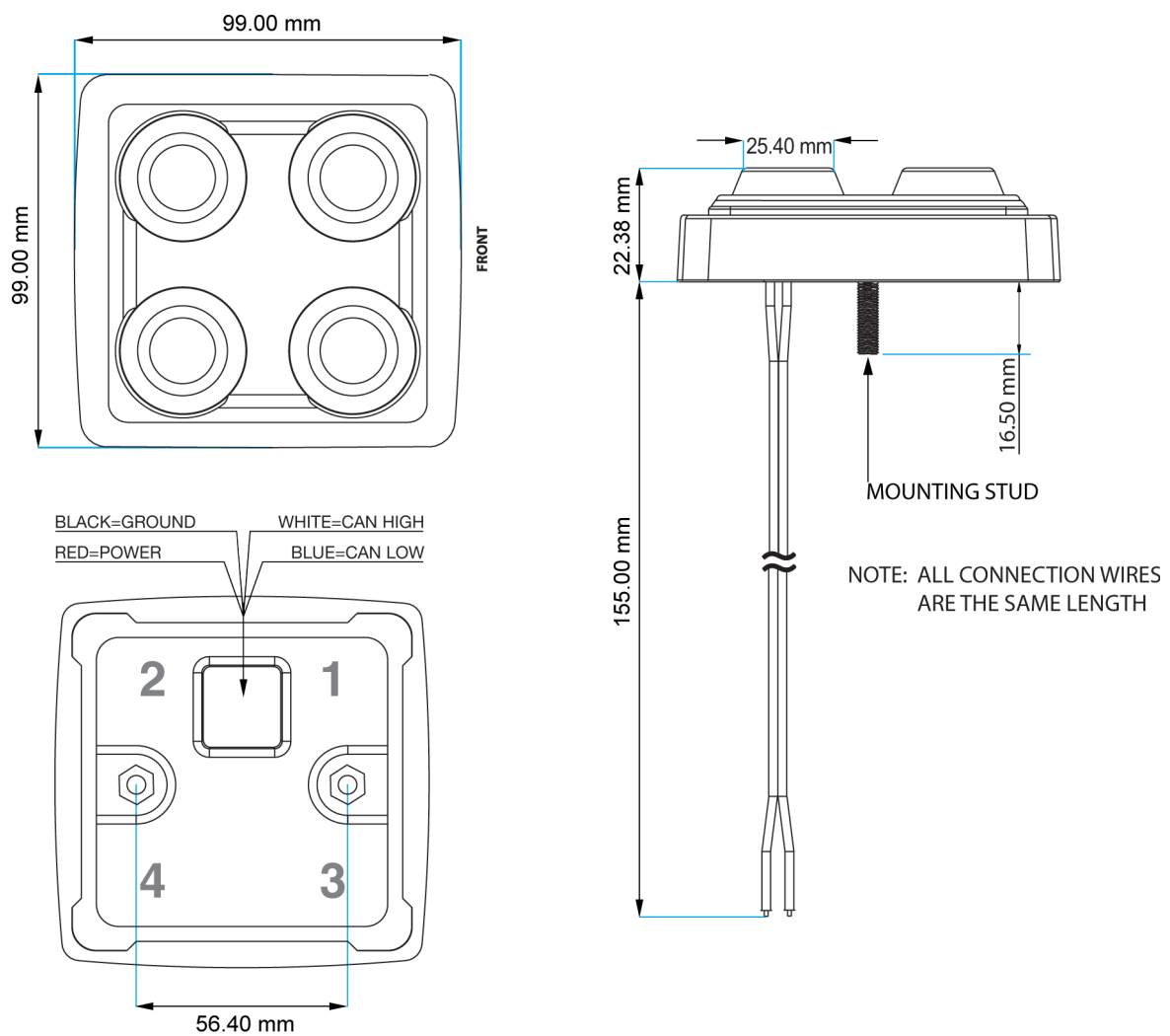
Technical specification

Power supply	8-24V
Standby current	< 50mA
Switch life	3 milion operations
Operating temp.	-40 to 85C
Enclosure protection	IP 67
CAN BUS speed	125kbps, 250kbps, 500 kbps

Technical drawing for 4 keys keyboard

CAN_BUS_KEYBOARD 4POS (old type with 24mm inserts, no longer available):

Technical drawings for 6 keys keyboards
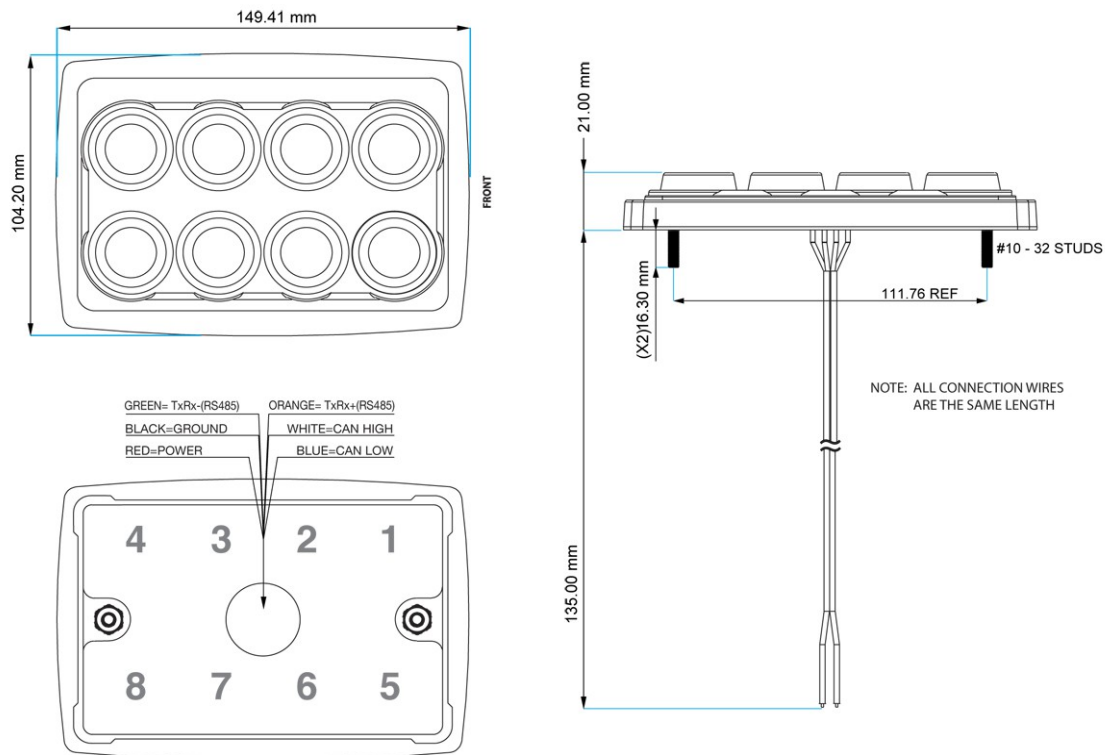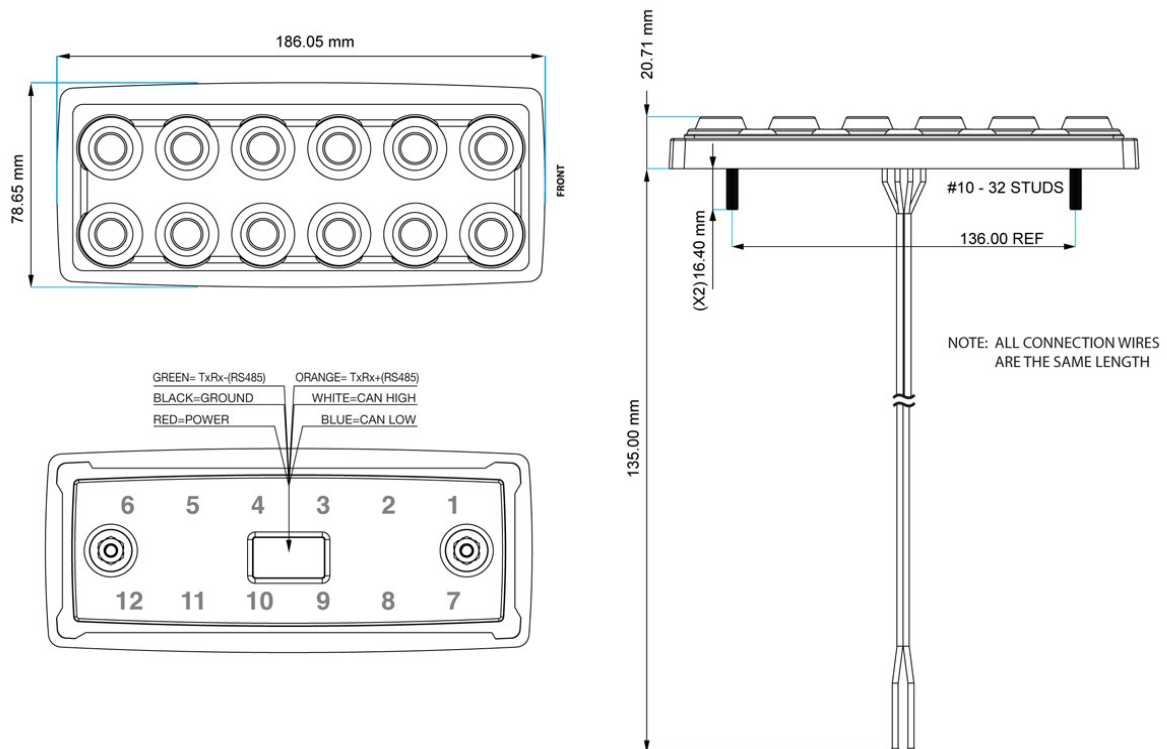
CAN_BUS_KEYBOARD_6POS_RGB (new type 15mm inserts):

95.00 mm
3.74"

70.00 mm
2.75"

21.00 mm
0.82"

(X2)16.30 mm
0.64"

#10 - 32 STUDS

49.00
1.92"

185.00 mm
7.28"

NOTE: ALL CONNECTION WIRES
ARE THE SAME LENGTH

GREEN= TxRx-(RS485)   ORANGE= TxRx+(RS485)

BLACK=GROUND   WHITE=CAN HIGH

RED=POWER   BLUE=CAN LOW

3   2   1

6   5   4
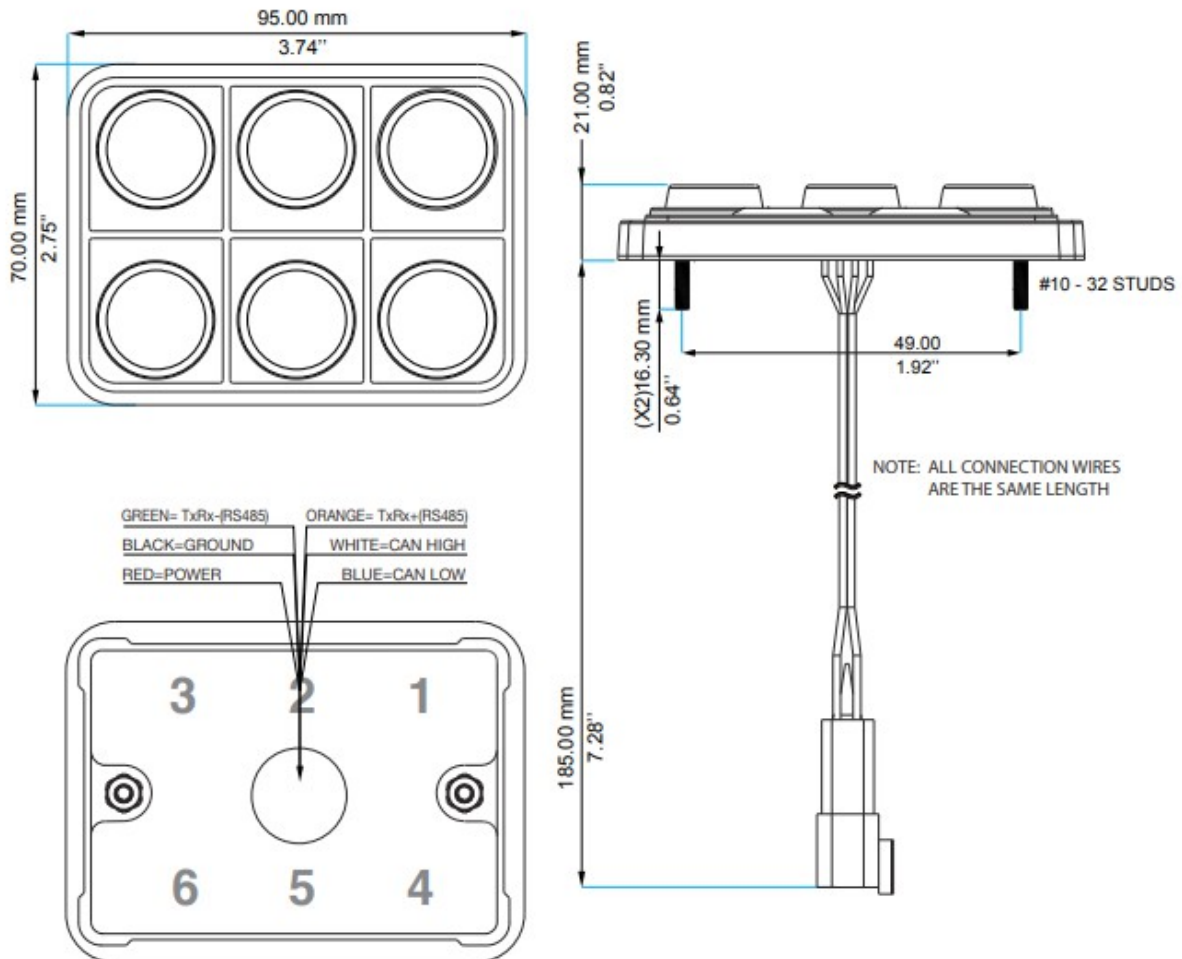
Technical drawings for 8 keys keyboards

CAN_BUS_KEYBOARD_8POS_RGB (new type 15mm inserts):
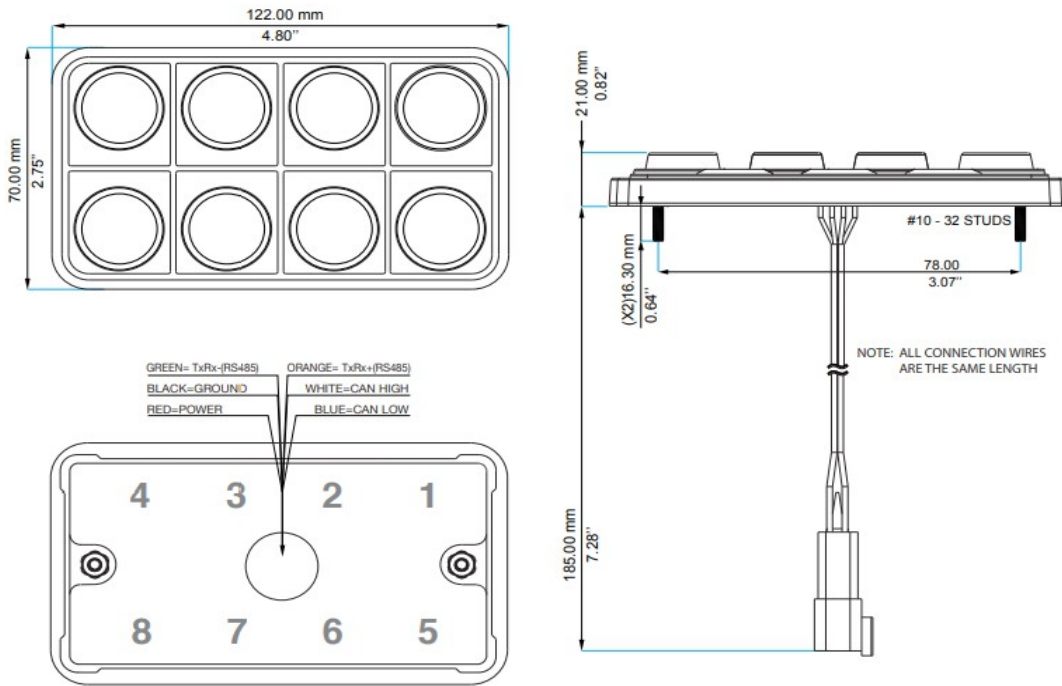
CAN_BUS_KEYBOARD_8POS (old type with 24mm inserts, no longer available):

Technical drawings for 12 keys keyboards

CAN_BUS_KEYBOARD_12POS_RGB (new type 15mm inserts):
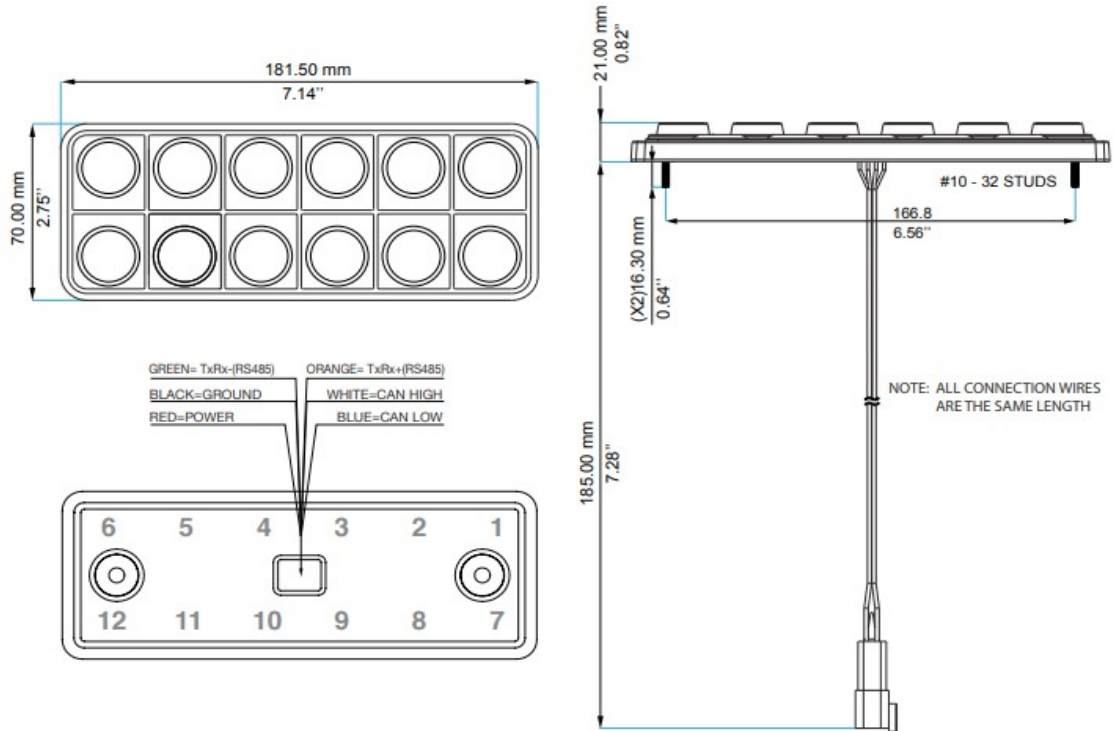
CAN_BUS_KEYBOARD_12POS (old type with 15mm inserts, no longer available):

CAN KEYBOARD INSERTS
(15mm and 24mm keys)

002	003	014	016	022	024
030	031	032	041	052	056
068	069	071	074	076	091
092	098	099	100	101	102
139	162	163	164	166	169
170	172	173	174	175	176
B193	B212	B265	B346	B409	B526

B527	B528	B529	B530	B531	B532

Special Keys (15mm):

B663	S001	S002	S003	S004	S005
S006					