



The AL50R portable console is a control device designed for the remote operation of industrial lifting machines, materials handling and aerial platforms equipped with the radio receiver RDC EVO and a CAN bus network.

The device allows to have maximum versatility both in the usage phase, thanks to the ergonomics of the product and the radio system connection, and in the design phase, as it is developed to handle up to 2 double-axe proportional joysticks, up to 10 pushbutton, up to 12 led and an emergency pushbutton with dry contacts. The operator layout is fully customizable.

The hamming security code and the packet communication protocol allow for a reliable radio connection and continuous work without any interruptions caused by radio interference on the 434 or 868 MHz band.



TECHNICAL FEATURES

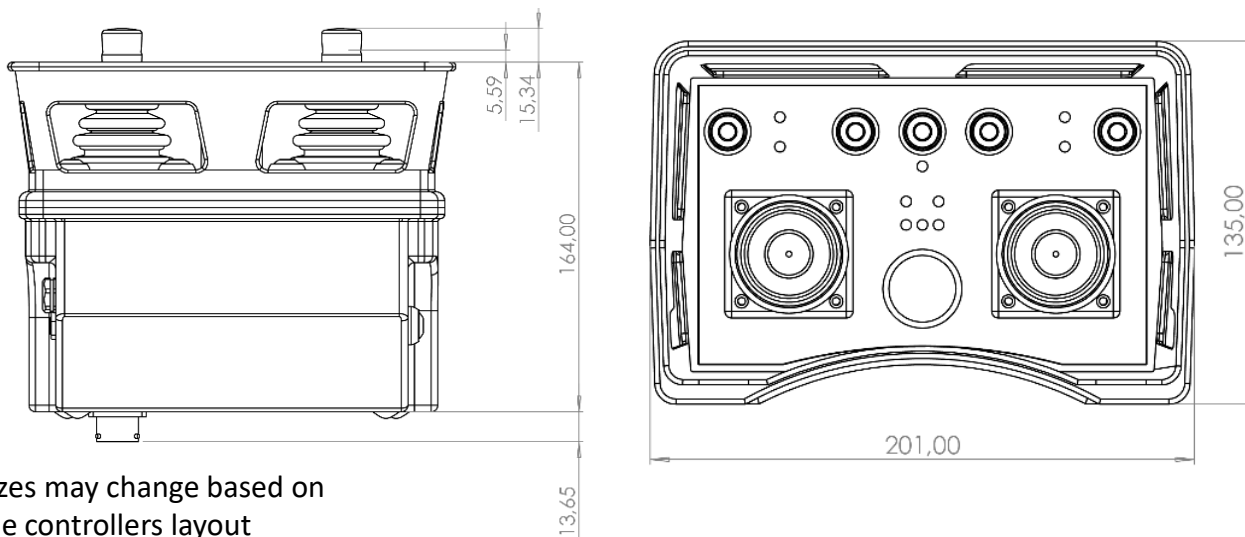
MASTER CODE	AL50R.453	
POWER SUPPLY	BATTERY: INTEGRATED NI-MH AUTONOMY: UP TO 8 HOURS IN CONTINUOUS TRANSMISSION (MAX 4 HOURS FOR A COMPLETE CHARGE)	
COMMUNICATION PORTS	RADIO: 868 MHz / 434 MHz BAND	
RADIO FEATURES	BAND: 868 MHz (869.700-870.00 MHz) / 434 MHz (433.050-434.790 MHz) CHANNELS: 12 (AUTOMATIC FREQUENCY SCAN) MODULATION: 2-GFSK\	
RADIO PROTOCOL	PACKET TRANSMISSION PROTOCOL (PROPRIETARY) BIDIRECTIONAL LINK HAMMING DISTANCE = 4 SAFETY STOP INTERVENTION TIME < 0,5s	
CONNECTIONS	BATTERY CHARGER: jack connector for battery charger 220VAC-12VDC adapter	
CASE	BLACK PA	
HANDLING	Waist belt/ shoulder strap	
TEMPERATURE	BATTERY SPECS: CHARGING T.: 0+45°C STORAGE T.: -20+45°C OPERATING: -10+ 60°C	ELECTRONIC SPECS: OPERATING T.: -25+70°C STORAGE T.: -40+70°C
PROTECTION	IP65	



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**STANDARDS**

ELECTROMAGNETIC (EMC)	ACCORDING TO DIRECTIVE 2014/30/EU: EN 61000-6-4 EN 61000-6-2 EN 50498
ROAD VEHICLES	ISO 7637-2: 2011 ISO 11452-1: 2005
INFORMATION TECHNOLOGY EQUIPMENT – SAFETY	EN 60950-1
RADIO SPECTRUM MATTERS (RED)	ACCORDING TO DIRECTIVE 2014/53/EU: ETSI EN 300.220-1 ETSI EN 300.220-2 ETSI EN 301.489-1 ETSI EN 301.489-3
PERFORMANCE AND SAFETY INTEGRITY LEVEL	EN ISO 13849-1 PLC – SIL1 (SINGLE-CHANNEL INTERNAL SCHEME)
EMEGENCY STOP BUTTON (manufacturer's specification)	EN60947-5-1 EN60947-5-5

SIZE (mm)

Sizes may change based on the controllers layout

COMPATIBLE RADIO RECEIVER UNIT

MASTER CODE	RDC EVO (SEE THE DATASHEET FOR MORE INFORMATION)
POWER SUPPLY	9 - 30 VDC
COMMUNICATION	NETWORK: CAN BUS 2.0B COMPLIANT – CANOPEN PROTOCOL RADIO: 868 MHz / 434 MHz BAND
CONNECTIONS	MAIN: TE DEUTSCH DTF13-6P ANTENNA: SMA socket
CASE	ENCAPSULATED IN PUR RESIN - UL94 (V0)





CONNECTOR PINOUT

BATTERY CHARGER CONNECTOR



VEHICLE CHARGER WITH CIGARETTE LIGHTER CONNECTOR (12/24 VDC)

P/N: ALNWR.276.CB.S01



BATTERY CHARGER 220 VAC ELECTRICAL SOCKET

P/N: ALNWR.276.CB.S03



AVAILABLE CONTROL ELEMENTS

EMERGENCY STOP BUTTON	MUSHROOM BUTTON WITH ROTATING RELEASE USAGE CONDITIONS ON DRY CONTACTS: 3 A a 120 V, AC-15, B300 1,5 A a 240 V, AC-15, B300 0,1 A a 250 V, DC-13, R300 0,22 A a 125 V, DC-13, R300
JOYSTICK	UP TO N.4 ANALOG INPUT FOR: → No. 4 SINGLE-AXLE JOYSTICK (X-X) with out-from-center detect input or → No.2 DOUBLE-AXES JOYSTICK (X-Y) with out-from-center detect input
PUSHBUTTONS	N.1 BUTTON FOR DEVICE POWER ON UP TO 10 DIGITAL INPUTS FOR - PUSHBUTTON - TOGGLE SWITCH - ROCKER SWITCHES - OTHERS ON REQUEST
SPOTLIGHT LED	N. 5 LEDS for the indication of the operating status, the battery charge level and coded messages UP TO 7 MONOCROMATIC LED FOR CUSTOMER USAGE
BUZZER	optional



SAMPLE LAOUT

FULLY CUSTOMIZABLE

CONSOLE STATUS LED

Custom led integrated on the graphic label

side buttons can be installed for custom applications e.g., for duplicates the functionality of each button or DMS function

EMERGENCY STOP BUTTON

WAIST BELT/ SHOULDER STRAP INCLUDED

CUSTOMIZABLE GRAPHIC LABEL

PUSHBUTTON AVAILABLE ON COLORS:
Blue, Dark blue, Black, Green, Grey, Yellow 6 Red, White, Bright chrome, Orange, Satin chrome

SINGLE-AXLE JOYSTICK

LOW PROFILE SINGLE-AXLE JOYSTICK

2-AXES JOYSTICK

JOYSTICK FEATURES

2-AXES

- HALL effect proportional manipulators 2 axes (x and y) with square/cross/diamond/circular limitation.
- Operating angle: 36°
- On request: cross limitation is done via software within 35s of the drive.
- Spring back to center.
- Output: Gain 40% (0.5-4.5V)
- Operating force 1.3N (max 400N)

SINGLE-AXLE

- HALL effect proportional manipulators
- Operating angle 25 mm
- Spring back to center.
- Available low profile (in shape) or high profile (out of shape)
- Output: Gain 40% (0.5-4.5V)
- Operating force: 75N

