



AL50RC

RADIO PORTABLE CONSOLLE



- Portable remote-control device for industrial lifting machines, materials handling and aerial platforms equipped with a CAN bus network and/or the RDC EVO receiver
- Double system connection (wired and radio)
- Up to 2 double-axle proportional joysticks
- Up to 10 pushbuttons
- Up to 12 led
- Emergency pushbutton with dry contacts
- Fully customizable layout
- Hamming security code for continuous work without interruptions on 434 or 868 MHz band

TECHNICAL FEATURES

MASTER CODE	AL50RC.453	
POWER SUPPLY	EXTERNAL POWER SUPPLY: 9-30 VDC BATTERY: INTEGRATED NI-MH AUTONOMY: UP TO 8 HOURS IN CONTINUOUS TRANSMISSION (MAX 4 HOURS FOR A COMPLETE CHARGE)	
COMMUNICATION PORTS	NETWORK: CAN BUS 2.0B COMPLIANT (11, 29 BIT) ISO 11898 2 UP TO 1Mbit/s 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	MAIN: SOURIAU CONNECTOR with DUST COVER CAP for external p.s., battery charge, CAN bus communication and Emergency button NC dry contact 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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**ELECTRONIC FEATURES**

**CAN BUS PROTOCOLS**      **CAN OPEN protocol**  
(CIA DS401 DEVICE PROFILE FOR GENERIC I/O MODULE, WITH DS306 EDS FILE)  
Baud rate: 10, 20, 50, 100, 125, 250, 500, 1000 kbps (Default = 250 kbps)

**PROGRAMMING**              FIRMWARE UPLOAD BY CAN BUS WITH ALOADER SOFTWARE TOOL

**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

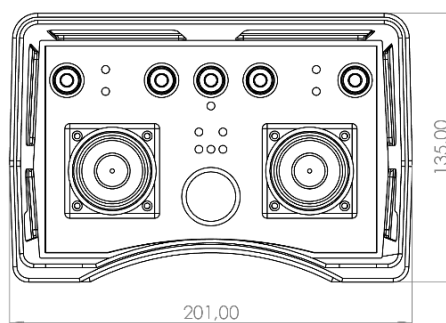
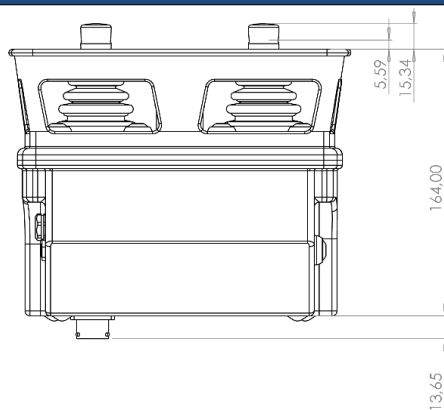
**INFORMATION TECHNOLOGY EQUIPMENT – SAFETY**      EN 60950-1

**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)



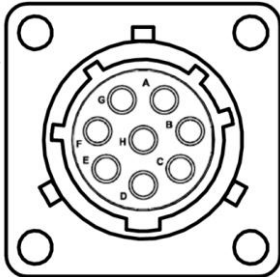


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**CONNECTOR PINOUT**

**MAIN CONNECTOR**



PIN	DESCRIPTION
A	POSITIVE power supply
B	GND power supply
C	CAN H
D	CAN L
E	Dry contact (emergency button)
F	Dry contact (emergency button)

**MATING CONNECTOR CODES**  
  
SOURIAU P/N: UTG608P and UT00128SH FPM

**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

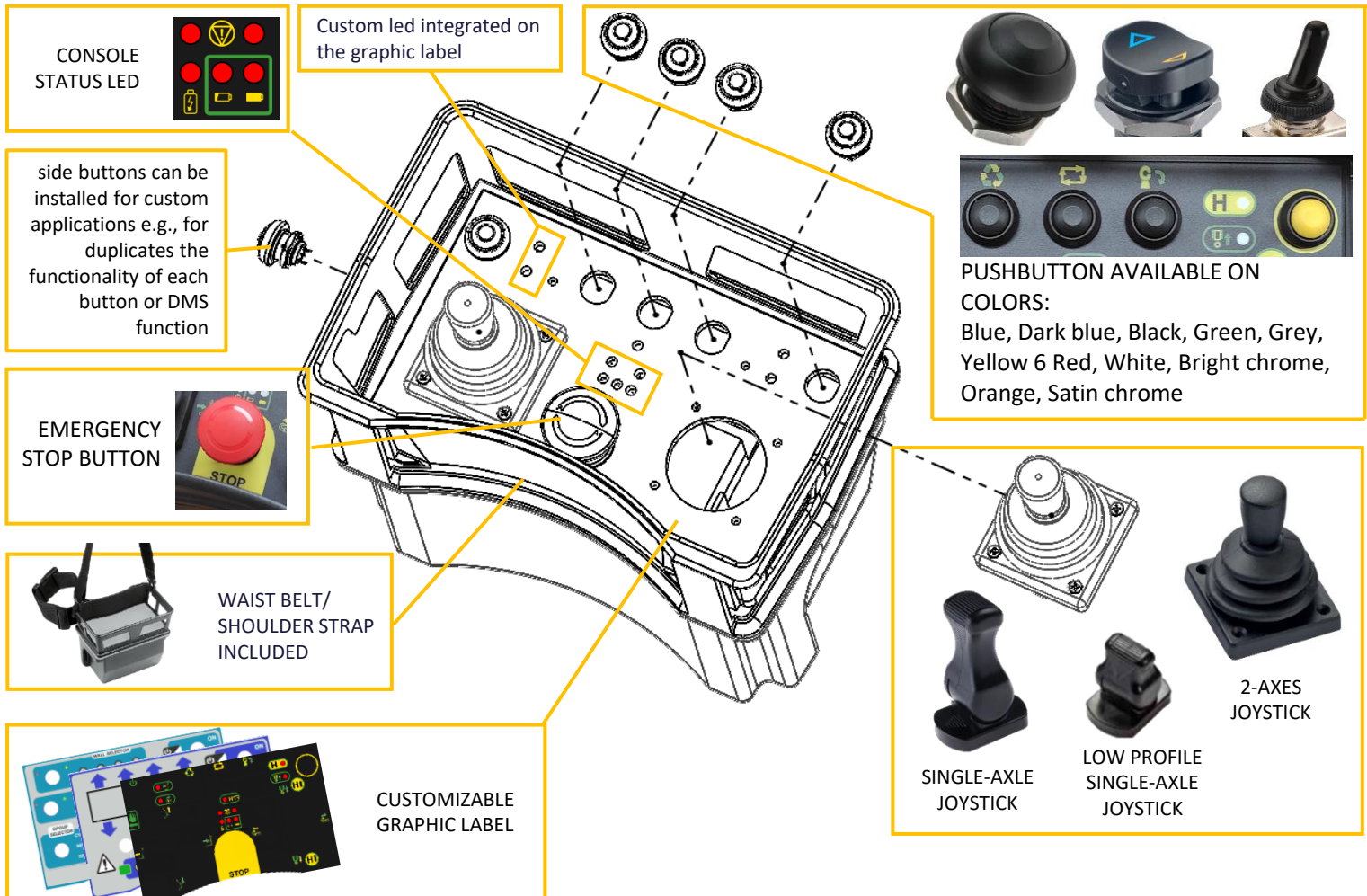


**AVAILABLE CONTROL ELEMENTS**

<b>EMERGENCY STOP BUTTON</b>	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
<b>JOYSTICK</b>	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
<b>PUSHBUTTONS</b>	N.1 BUTTON FOR DEVICE POWER ON UP TO 10 DIGITAL INPUTS FOR - PUSHBUTTON - TOGGLE SWITCH - ROCKER SWITCHES - OTHERS ON REQUEST
<b>SPOTLIGHT LED</b>	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
<b>BUZZER</b>	optional

SAMPLE LAYOUT

FULLY COSTUMIZABLE



**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**

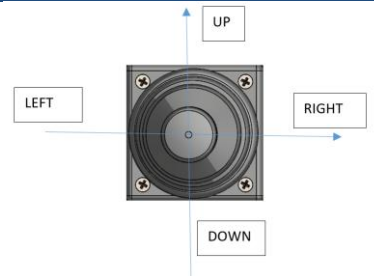
**LOW PROFILE SINGLE-AXLE JOYSTICK**

**2-AXES JOYSTICK**

JOYSTICK FEATURES

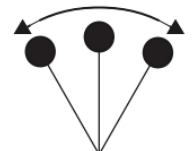
2-AXES

- 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





NOTE

