ALMEC MECHATRONICS

RD.CAN

RADIO CAN BUS RECEIVER

The RD.CAN is a radio receiver unit, suitable for safety application where is required a high safety level performance. For some application, it can be suitable for radio transmission.

Easy to program, using the ALMEClab development platform, it can be implemented in a serial line (RS232) or in a CAN network, as MASTER or SLAVE.

The polyurethane resin case makes the controllers suitable for use on machines that operate in harsh work environments.

ALMEC LAB

TECHNICAL FEATURES

MASTER CODE		RD.CAN.00		
POWER SUPPLY		9-36VDC/ CURRENT ABSORPTION 50mA AT 24VDC (STAND BY MODE)		
INPUT	**2**	2 ANALOGIC INPUTS 0..40V - PIN SHARED WITH OUTPUT		
OUTPUT	**16**	2 DIGITAL OUTPUTS (500mA) – PIN SHARED WITH INPUT		
		14 CURRENT CLOSED LOOP (UP TO 4A)	OR	7 RATIOMETRIC (4A OUT + SIGNAL)
COMMUNICATION PORTS	**2**	**1 PORT**	CANOPEN – CAN BUS 2.0B COMPLIANT – (11, 29 BIT) – ISO 11898-2 UP TO 1Mbit/s	
		1 PORT (ON REQUEST)	CAN (ISO 11898-2 UP TO 1 Mbit/s) or SERIAL RS232 (UP TO 115,2 kbps) or SERIAL RS485/RS422	
RADIO		CE: 868 MHz BAND, 12 CHANNELS (AUTOMATIC FREQUENCY SCAN) , SENSITIVITY -109dBm ON REQUEST: UL: 2,4GhZ, 77 CHANNELS, 15 BIT DSSS MODULATION, SENSITIVITY -93dBm OPTIONAL: EXTERNAL ANTENNA SIGNAL		
RADIO PROTOCOL		BIDIRECTIONAL LINK HAMMING DISTANCE = 4 SAFETY STOP INTERVENTION TIME < 0,5s		
WI-FI		ON REQUEST: IEEE802.11 b/g/n		
RFID		ON REQUEST: 13,56 MHz, ISO15693, ISO14443A, ISO14443B COMPLIANT.		
CONNECTIONS	**1**	MOLEX 48 PIN		
WORKING TEMPERATURE		-40°C +80°C		
CASE		PUR		

Scan me

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ELECTRONIC FEATURES

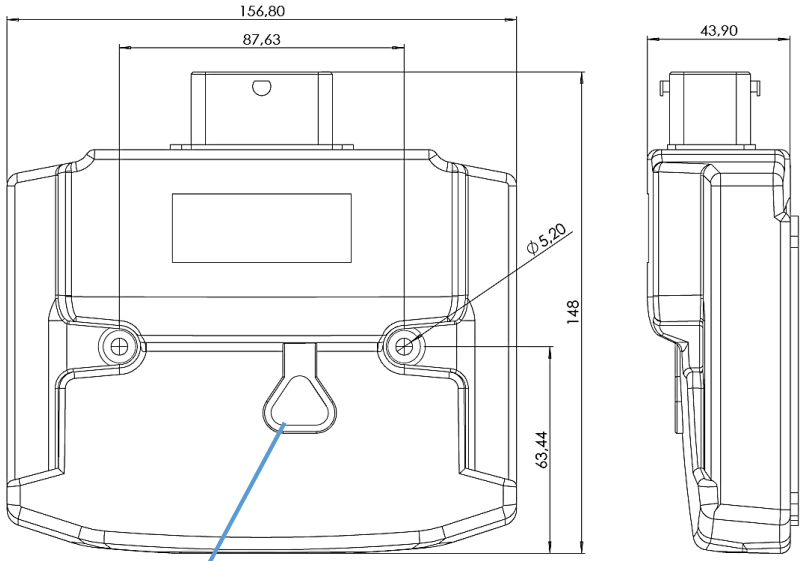
SLAVE USAGE	EDS FILE
MASTER USAGE	ALMEClab
	STANDARD C PROGRAM LANGUAGE
PROGRAMMING	FIRMWARE UPLOAD BY CAN BUS WITH ALOADER SOFTWARE TOOL
CYCLE TIME	RADIO LINK: LESS THAN 50 ms LOGIC: LESS THAN 5 ms
INTERNAL SYSTEM CONTROL	DUAL REDUNDANT MICROPROCESSOR WATCHDOG SELF CHECKED SAFETY OUTPUT RELAY
MEMORY	FLASH (PROGRAM MEMORY): 1MB RAM MEMORY: 256KB EEPROM: 128KB

STANDARDS

ELECTROMAGNETIC EMISSIONS	EN 61000-6-4// EN 55011 (RF RADIATE)
ELECTROMAGNETIC IMMUNITY	EN61000-6-2// EN 61000-4-2/3/4/6
RADIO SPECTRUM MATTERS	CE: ETSI 300.220.1 // ETSI 301.489.1 UL: U.S. FCC Part 15.247, IC RSS-210
IP	IP68
PERFORMANCE AND SAFETY INTEGRITY LEVEL	SAFETY REALY: PLd – SIL2 OUTPUT: PLc – SIL1

IN ACCORDANCE WITH THE EN50498 THE DEVICE MEETS THE TECHNICAL SPECIFIC REQUIREMENTS OF 2004-104 DIRECTIVE (AUTOMOTIVE). THE DEVICE IS EMC 2004/108 COMPLIANT.

SIZE (mm)



BOARD / APPLICATION STATUS
CAN STATUS
ERRORS / BATTERY CHARGER MANAGEMENT

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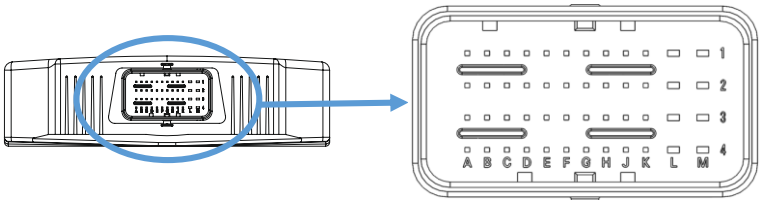
ALMEC MECHATRONICS

RD.CAN

RADIO CAN BUS RECEIVER

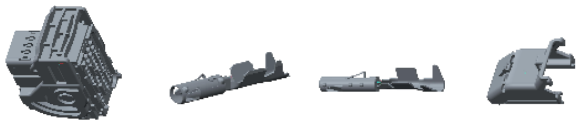


CONNECTOR PINOUT – 48 PINS FUNCTIONS

PIN	A	B	C	D	E	F	G	H	J	K	L	M
1	HIGH SIDE OUT14	HIGH SIDE OUT6	HIGH SIDE OUT13	HIGH SIDE OUT5	HIGH SIDE OUT12	HIGH SIDE OUT4	HIGH SIDE OUT11	HIGH SIDE OUT3	GND	HIGH SIDE OUT10	HIGH SIDE OUT9	POSITIVE OUTPUTS SUPPLY
2	HIGH SIDE OUT7	SENSOR POWER SUPPLY	SENSOR POWER SUPPLY	GND	GND	GND	GND	GND	GND	HIGH SIDE OUT2	HIGH SIDE OUT1	SAFETY STOP FREE CONTACT
3	HIGH SIDE OUT15	GND	GND	GND EXT ANTENNA	GND	GND	GND	GND	GND	GND	GND POWER SUPPLY	SAFETY STOP FREE CONTACT
4	HIGH SIDE OUT8	HIGH SIDE OUT16	DIGITAL HIGH SIDE OUT17 / IN1	EXT ANTENNA SIGNAL	DIGITAL HIGH SIDE OUT19 / IN2	PORT 1 CAN1 H	PORT 1 CAN1 L	PORT 2	PORT 2	GND	POSITIVE POWER SUPPLY	POSITIVE POWER SUPPLY

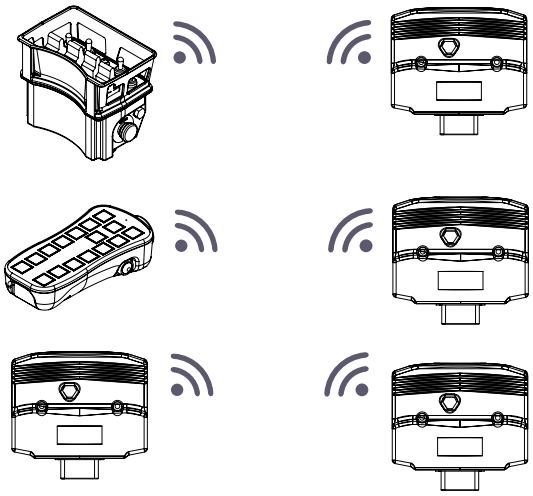
OPTIONAL

EXTERNAL ANTENNA SIGNAL
CODE: ANT.KT.S01
KIT ANTENNA 868MHZ WITH MOUNTING BRACKET AND CONNECTOR (CABLE LENGHT 3m)


64320-3311 64323-1029 64322-1029 64320-1301

COUPLING CONNECTORS - 48 PIN (MOLEX CODES)	
CONNECTOR	64320-3311
TERMINALS	64323-1029 (x8)
	64322-1029 (x40)
WIRE CAP	64320-1301

SAMPLE CONFIGURATIONS (COMBINATION WITH AL.MEC PRODUCTS)



PROPORTIONAL REMOTE CONTROL

APPLICATIONS	HIGH PERFORMANCES RADIO REMOTE CONTROLLERS

USABLE WITH OUR **AL50R.00** ALMEC RADIO REMOTE CONTROLLER

ON/OFF REMOTE CONTROL – MONO AND BIDIRECTIONAL LINK

APPLICATIONS	HIGH PERFORMANCES RADIO REMOTE CONTROLLERS

USABLE WITH AL.MEC RADIO REMOTE CONTROLLERS **AL35TX/AL14TX/ALNWR**

BIDIRETIONAL TRANSPARENT RADIO LINK

APPLICATIONS	RADIO LINK TRANSCEIVER OF REMOTE CAN LINES RADIO LINK FOR REMOTE I/O REPLICATOR

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NOTE