RCIW
Radio remote control

Radio remote control with handheld transmitter suitable for winches, hoists, overhead travelling cranes, tower cranes and crushers&screwers, recovery&tow vehicles, concrete mixing pumps and dust fighters. Ergonomic, sturdy and reliable.

FEATURES

- Small-size and lightweight remote controls which allow for greater freedom of movement and a more comfortable and safe hand-grip, even in case of long work sessions.
- Transmitters featuring 4 LEDs that signal operating status, battery level and fault messages.
- Based on AFA (Adaptive Frequency Agility) technology to avoids manual frequencies changes: the less impeded channel among the available ones is continuously searched and selected by the radio remote control.
- IP protection degree: RCIW radio remote controls are classified IP65 (NEMA 4).
- Extreme temperature resistance: from -25°C to +70°C.
- Cases in reinforced UL94 HB Nylon.
- Featuring a safety customizable PIN CODE to restrict the use of the radio remote only to authorized personnel.
- Provided with Event Log: RCIW radio remote controls memorize all events that may have led to failures or unexpected stops, as well as the device operating hours.

OPTIONS

- Available in configurations from 8 or 12 buttons and max. 28 functions (without graphic display) and from 6 or 10 buttons and max. 20 functions (with graphic display).
- With or without Ple/SIL3/Cat4 safety level self-locking stop command with reset system to ensure the highest level of safety.
- Handy buttons, suitable for long work shifts, with customizable symbology.
- Wide range of auxiliary commands to be hosted in the side compartment: selectors, single speed pushbuttons, trigger and toggle switches, potentiometers, key selectors and consent pusbuttons to allow potentially dangerous functions by guarateeing the presence of the operator and his alert status.
- Transmitters featuring keypad illuminator for uses in the darkness or to be used as torch, suitable to be combined with a light sensor.
- Featuring I-Ready: infrared directional START operation guarantees the right machine has been picked up.
- With MTRS (multi transmitter receiver system) option to operate with double transmitters or double receivers in Master & Slave, Take & Release, Tandem configurations.
- Equipped with ergonomic shoulder-strap and protective sleeve, which makes easier the use in extreme working conditions without altering its ergonomic shape.
- Provided with fast battery charger and removableand rechargeable Li-ion polymery (LiPo) batteries, featuring a negligible memory effect and up to 25 hours of continous operation.
- PiTool available to interface the transmitter and the receiver units with a PC to set operating settings and collect diagnostic information.

CERTIFICATIONS

- CE Marking.
- ACMA, EAC, FCC*, IC*, KCC*, MIC* Certifications.
- Performance Level Categoria 4 PL e.

Manufactured by IMET Srl - Distributed by TER Tecno Elettrica Ravasi Srl.
* Not available on all versions.

RCIW S

Radio remote control designed for winches, hoists, overhead travelling cranes, tower cranes.
Available in configurations with 6 buttons featuring a 64x102 pixel graphic display or 8 buttons without graphic display.
RCIW S is a compact and ergonomic radio remote control, with a wide range of auxiliary commands (max. 20 ON/OFF commands).
Featuring PIe/SIL3/Cat4 safety level stop mushroom.

RCIW L

Radio remote control designed for for winches, hoists, overhead travelling cranes, tower cranes.
Available in configurations with 10 buttons featuring a 64x102 pixel graphic display or 12 buttons without graphic display.
RCIW L is a compact and ergonomic radio remote control, with a wide range of auxiliary commands (max. 28 ON/OFF commands).
Featuring PIe/SIL3/Cat4 safety level stop mushroom.

RCIW SC

Radio remote control designed for crushers&screwers, recovery&tow vehicles, concrete mixing pumps and dust fighters.
Available in configurations with 6 buttons featuring a 64x102 pixel graphic display or 8 buttons without graphic display.
RCIW SC is a compact and ergonomic radio remote control, with a wide range of auxiliary commands (max. 20 ON/OFF commands).

RCIW LC

Radio remote control designed for crushers&screwers, recovery&tow vehicles, concrete mixing pumps and dust fighters. Available in configurations with 10 buttons featuring a 64x102 pixel graphic display or 12 buttons without graphic display. RCIW LC is a compact and ergonomic radio remote control, with a wide range of auxiliary commands (max. 28 ON/OFF commands).

CERTIFICATIONS

Conformity to Community Directives	2006/42/CE Machinery Directive
	2014/30/UE Electromagnetic compatibility (EMC)
	2014/53/EU Radio Equipment Directive (RED)
Conformity to CE Standards	EN 17067 Forestry machinery - Safety requirements on radio remote controls
	EN 60529 Degrees of protection provided by enclosures
	EN 60204-32 Safety of machinery - Electrical equipment of machines - Requirements for hoisting machines
	EN 13557 Cranes - Controls and control stations
	EN ISO 13849-1 Safety of machinery - Safety-related parts of control systems - General principles for design
	EN 61326-3-1 Electrical equipment for measurement, control and laboratory use - EMC requirements - Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) – General industrial applications
	EN 61000-6-2 Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity standard for industrial environments
	EN 61000-6-3 Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments
	EN 62368-1 Audio/video, information and communication technology equipment - Part 1: Safety requirements
	EN 62745 Safety of machinery - Requirements for cableless control systems of machinery
	EN 62479 Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)
	ETSI EN 300 220-1 Short Range Devices (SRD) operating in the frequency range 25 MHz to 1000 MHz - Technical characteristics and methods of measurement
	ETSI EN 300 220-2 Short Range Devices (SRD) operating in the frequency range 25 MHz to 1000 MHz; Harmonised Standard for access to radio spectrum for non specific radio equipment
	EN 300 328Wideband transmission systems - Data transmission equipment operating in the 2,4 GHz band - Harmonised Standard for access to radio spectrum
	EN 301 489-1 ElectroMagnetic Compatibility (EMC) standard for radio equipment and services - Common technical requirements - Harmonised Standard for ElectroMagnetic Compatibility
	EN 301 489-3 ElectroMagnetic Compatibility (EMC) standard for radio equipment and services - Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz - Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU
	EN 301 489-17 ElectroMagnetic Compatibility (EMC) standard for radio equipment and services - Specific conditions for Broadband Data Transmission Systems - Harmonised Standard for ElectroMagnetic Compatibility
Markings and homologations	CE ACMA EAC FC* * * IC*

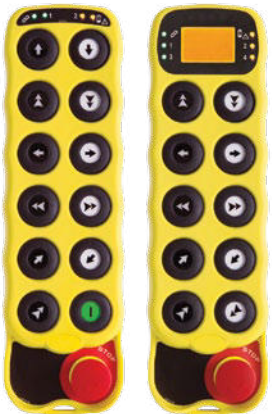
* Not available on all versions.

TECHNICAL SPECIFICATIONS OF THE TRANSMITTER UNIT

Type	RCIW S and RCIW L	RCIW SC and RCIW LC
Ambient temperature	Storage -40°C/+85°C	
	Operational -25°C/+70°C	
IP protection degree	IP 65 (NEMA 4)	
Max. number ON/OFF controls	RCIW S: 20 max	RCIW SC: 20 max
	RCIW L: 28 max	RCIW LC: 28 max
Max. number analog controls (optional)	4 max	
Number of service and safety controls	3 (Start, Clacson, Stop)	
1 STOP command	(ISO 13849-1:2006 6.2.7 architeture) PLe Category 4	(ISO 13849-1:2006 6.2.5 architeture) PLC Category 2
Number of pushbuttons	RCIW S: 8 max / 6 max with display	RCIW SC: 8 max / 6 max with display
	RCIW L: 12 max / 10 max with display	RCIW LC: 12 max / 10 max with display
Work frequency 1	I.S.M. Band 433.050-434.790 MHz Number of programmable channels: 69 AFA mode (Adaptive Frequency Agility) or on fixed channel Max. power: 1 mW e.r.p	
Work frequency 2	I.S.M. Band 434.040-434.790 MHz Number of programmable channels: 30 AFA mode (Adaptive Frequency Agility) or on fixed channel Max. power: 10 mW e.r.p.	
Work frequency 3	I.S.M. Band 2400-2483.5 MHz Number of programmable channels: 16 (DSSS) Max. power: 100 mW e.r.p.	
Maximum operating distance	100 m	
Supply voltage	3,7 Vdc	
Absorption	80 mA	
Max. supply power	0,3 W max	
Battery	Li-Ion 3,7 V 2000 mA	
Battery autonomy at 20°C with charged and continuously operated battery	~ 25 hours	
Low battery level advance warning time	~ 15 min	
Buzzer	Internal	
Radio transmission	Double	
LEDs	Link TX, Link RX, Error code	
Housing material	Loaded nylon UL94 HB	

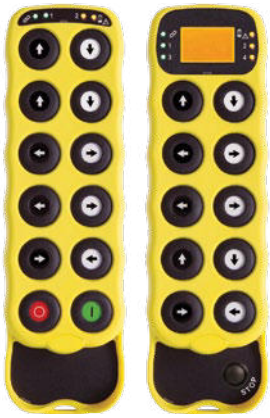
TRANSMITTER UNITS OVERALL DIMENSIONS

RCIW S
72 x 42 x 190 mm
235 g



RCIW L
72 x 42 x 255 mm
315 g

RCIW SC
72 x 42 x 190 mm
235 g



RCIW LC
72 x 42 x 255 mm
315 g

TECHNICAL SPECIFICATIONS OF THE RECEIVER UNITS

Type	H AC / H DC	L AC / L DC	S AC / S DC	M AC
Operational ambient temperature	-25°C/+70°C	-25°C/+60°C	-25°C/+60°C	-25°C/+70°C
IP protection degree	IP 66			IP 20
Power supply	H AC: 45-240 Vac (50-60 Hz)	L AC: 24-240 Vac (50-60 Hz)	S AC: 24 Vac (50-60 Hz) / 12÷30 Vdc (24-440 Vac [50-60 Hz] optional)	12÷30 Vdc / 24 Vac (50-60 Hz)
	H DC: 11÷30 Vdc e 24 Vac (50-60 Hz)	L DC: 11÷30 Vdc	S DC: 12÷30 Vac	-
Safety controls	Stop, Safety-Enable (up to 8)	Stop, Safety-Enable		
Generic commands	73 relays or MOSFET, 32 analog (PWM, current, voltage) (depending on the configuration)	16 relays or 20 MOSFET, 8 analog (PWM, current, voltage)	S AC: 14 relays (NO)	22 relays (18 NO and 4 NC / NO), 4 analog (Current, voltage)
	-	-	S-DC: Max 14 MOSFET (NO), 4 analog, 2 digital IN	-
Service commands	Start, Horn, Timed-Relay	L AC: Start, Horn	Start, Horn	
	-	L DC: Start, Horn, Timed-Relay	-	-
Stop command category (depending on the configuration)	PLe Cat 4, ISO 13849-1 6.2.7 architecture	PLe Cat 4, ISO 13849-1 6.2.7 architecture	PLe Cat 4, ISO 13849-1 6.2.7 architecture. PLc Cat 1, ISO 13849-1 6.2.3 architecture, (With ARES2 C and WAVE2 C)	PLe Cat 4, ISO 13849-1 6.2.7 architecture
Fieldbus	RS232 / RS485 (115200 Baud max) CAN_Bus (ID 11-29 bit) (1Mbit/s max) CANOpen (ID 11-29 bit) (1Mbit/s max)	RS232 / RS485 (115200 Baud max) CAN_Bus (ID 11-29 bit) (1Mbit/s max) CANOpen (ID 11-29 bit) (1Mbit/s max), Profinet, Ethernet IP	RS232 / RS485 (115200 Baud max) CAN_Bus (ID 11-29 bit) (1Mbit/s max) CANOpen (ID 11-29 bit) (1Mbit/s max)	RS232 / RS485 (115200 Baud max) CAN_Bus (ID 11-29 bit) (1Mbit/s max) CANOpen (ID 11-29 bit) (1Mbit/s max), Profinet, Ethernet IP
Integrated flashing light	-	-	Only AC type	-

RECEIVER UNITS OVERALL DIMENSIONS

H AC / H DC
205 x 130 x 280 mm
3500 g

AC

DC

S AC / S DC
127 x 147 x 70 mm
600 g

L AC / L DC
140 x 65 x 230 mm
1700 g

M AC
180 x 73 x 120 mm
900 g