


## LATEST GENERATION OF SMART TERMINALS FOR REMOTE WIRELESS CONTROL OF EQUIPMENT



**RADIO AND SAFETY ADAPTED TO THE PILOTING NEEDS OF VARIOUS INDUSTRIAL APPLICATIONS.**

A new generation has arrived integrating major innovations.

The solutions proposed meet the requirements of application markets, which have over time become JAY Electronique's specialization.

							
<b>radiocrane</b>	<b>radiogreen</b>	<b>radiodrive</b>	<b>radiobuild</b>	<b>radiosafe</b>	<b>radiofarm</b>	<b>radiolift</b>	<b>radiomotion</b>
INDUSTRIAL LIFTING & HANDLING	WASTE PROCESSING EQUIPMENT	INDUSTRIAL VEHICLES	PUBLIC WORKS AND QUARRY EQUIPMENT	INDUSTRIAL EQUIPMENT	FARMING AND FOREST MANAGEMENT EQUIPMENT	MAN LIFTING & TRANSPORT EQUIPMENT	INFRASTRUCTURE EQUIPMENT

## MANY SOLUTIONS DEVELOPED FOR THE FOLLOWING APPLICATION MARKETS :



### ➤ radiocrane

Overhead conveyor  
Overhead travelling crane



### ➤ radiogreen

Brush cutter  
Brush grinder and chipper  
Iron and steel scrap press  
Water treatment equipment  
Pressure cleaner, vacuum cleaner  
and air gun



### ➤ radiodrive

Transport of bulk and dried food  
Bulk bin loading/unloading arm  
Sewer hydrocleaning vehicle  
Special transport trailers



### ➤ radiobuild

Tower crane  
Self-driven pump, belt, concrete mixer  
Crusher and materials sifter  
Demolition machine / robot  
Drilling, perforation and slicing  
machinery  
Coal or rock cutters



### ➤ radiosafe

Automated storage  
AGV  
Self-propelled handling  
Adjustment on an automated machine  
Manual control machine  
Interventions on dangerous equipment



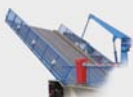
### ➤ radiofarm

Forestry timber cross-cutting  
and hauling  
Wine pump



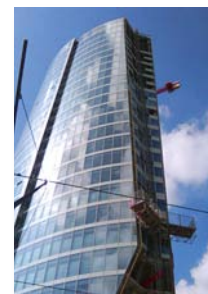
### ➤ radiolift

Lift  
Escalator  
Permanent building maintenance  
platforms  
Ski lifts



### ➤ radiomotion

Waterway bridge  
Port crane or conveyor belt  
Gas, oil and cereals loading arm  
Airport equipment  
Lighting and handling  
of stage sets  
Railway equipment





# safir

Due to the wide range of areas in which radio remote controls are used, your radio remote control needs to be perfectly suited to your needs.

With our new product line, our solutions have been thought out to meet your requirements, with options and variants dedicated to your activity, and give you the autonomy setting for your application through iDialog software.



## ERGONOMIC

Very special care has been taken in the design and ergonomics of our solutions to ensure rugged products providing maximum comfort in use day after day.

JAY's remote control buttons provide optimum touch sensitivity and are sized to allow the operator to easily use the radio remote control even when wearing gloves.

The buttons are laid out to prevent the operator from mistakenly pressing two buttons at the same time.

## RUGGED

Designed to work under the toughest conditions, our products are built and sized to be extra-rugged. Specially designed seals and protective foams ensure the highest level of strength and tightness.

## EASY TO MAINTAIN

By the modular architecture of our systems, maintenance is facilitated to allow reduced-cost repairs.

To ensure fast diagnostics and preventive maintenance on the radio control system, fault isolation is achieved easily and efficiently by an indication on the display or by connecting to a PC computer on which iDialog software has been installed (supplied with order). Also, this software allows you to change a setting.



The simple, secure match-up between the operator module and the transceiver makes it easy and fast to replace one of the two components in the event of a failure.

## SAFETY

Safety is at the heart of our concept. So, safir product line has a certified stop «SIL 3» per EN 61508 and «PL e» per EN ISO 13849, representing the highest level of safety.

Different options are available to enhance the safety of those applications requiring it (infrared startup, action zone limitation, validation buttons, use in ATEX area, function buttons SIL 2 according to EN 61508 and PL d according to EN ISO 13849).

Access to the radio remote control and certain functions can be limited to authorised operators by password (PIN codes).

Most of our products have a CE type examination certificate issued by a notified body.

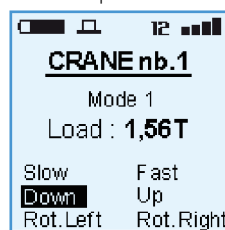


Functional Safety  
Type Approved



## SCREEN

As a standard feature on last generation solutions, the backlit, anti-reflection, shock-proof, scratch-proof screen displays :



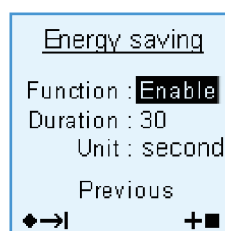
- the battery charge level
- the behaviour of the radio link
- the name of the equipment remote-controlled
- feedback from the equipment controlled and operating alarms (weight of load, overload, limit switches)
- fault diagnostics.

Sophisticated, intuitive and guided navigation with menus allowing you to :

- configure the application
- integrate a large number of functions
- monitor a specific part of the equipment.

### Customisable

Each product comes with iDialog software to allow you to customize the display, logos and pictograms which appear on the screen.





## Beta



### Compact, easy to handle, flexible Operator module

2 or 6 function buttons + 2 navigation buttons  
+ start/validation + Stop  
3 different button types available  
IP65 tightness Operator module  
Integrated or Plug-in rechargeable battery  
Operator module support charger  
Safety stop PL e EN ISO 13849 and SIL 3 EN 61508  
Bidirectional communication  
64 frequencies in 433-434MHz  
12 frequencies in 869MHz  
64 frequencies in 911-918MHz  
Many options available :  
• infrared,  
• vibrator...



## Gama



### Robust, Ergonomic, Secure Operator module

6 or 10 function buttons + 2 navigation buttons  
+ start/validation + stop  
3 different button types available  
IP65 tightness Operator module  
Plug-in rechargeable battery  
Operator module support charger  
Function buttons designed to SIL 2 per EN 61508 and PL d per EN ISO 13849  
Safety stop PL e EN ISO 13849 and SIL 3 EN 61508  
Bidirectional communication  
64 frequencies in 433-434MHz  
12 frequencies in 869MHz  
64 frequencies in 911-918MHz  
Many options available :  
• infrared,  
• vibrator...

## Pika



### Compact, Ergonomic Operator module

1 or 2 joysticks + 4 or 6 function buttons  
+ 2 navigation buttons + start/validation + stop  
6 different button types available  
IP65 tightness Operator module  
Plug-in rechargeable battery  
Safety stop PL e EN ISO 13849 and SIL 3 EN 61508  
Bidirectional communication  
64 frequencies in 433-434MHz  
12 frequencies in 869MHz  
64 frequencies in 911-918MHz  
Many options available :  
• recovery control by cable link,  
• infrared,  
• vibrator...

## Moka



### Modular, multifunction Operator module

2, 3 joysticks or 6 levers + 4 to 16 function buttons  
+ 2 navigation buttons + start/validation + stop  
6 different button types available  
IP65 tightness Operator module  
Plug-in rechargeable battery  
Safety stop PL e EN ISO 13849 and SIL 3 EN 61508  
Bidirectional communication  
64 frequencies in 433-434MHz  
12 frequencies in 869MHz  
64 frequencies in 911-918MHz  
Many options available :  
• recovery control by cable link,  
• infrared,  
• vibrator...





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## Timo



### Communicating and compact Transceiver

- 6 transistor outputs On/Off or PWM type
- 2 analog outputs
- 2 logic inputs
- 1 analog input
- 1 RTU slave RS485 Modbus interface
- 1 CANopen interface
- IP65 tightness
- Safety stop PL e EN ISO 13849 and SIL 3 EN 61508
- Bidirectional communication
- 64 frequencies in 433-434MHz
- 12 frequencies in 869MHz
- 64 frequencies in 911-918MHz
- Many options available :
  - external antenna,
  - infrared,
  - synchronisation of equipment...



## Alto

### Modular and multifunction Transceiver

- 2 function relays + 2 safety relays
- 1 logic input
- 1 analog input
- 1 RTU slave RS485 Modbus interface
- IP65 tightness
- Safety stop PL e EN ISO 13849 and SIL 3 EN 61508
- Bidirectional communication
- 64 frequencies in 433-434MHz
- 12 frequencies in 869MHz
- 64 frequencies in 911-918MHz
- Many options available :
  - Boards (3 slots available on mainboard) :
    - board with 12 function relays
    - board with 12 logic inputs + 2 analog inputs
    - board with 6 analog outputs + 1 bypass output
    - board with CANopen interface
  - recovery control by cable link,
  - infrared,
  - synchronisation of equipment...



## Elio







### Optimised and open-ended Transceiver

- 12 function relays + 1 «On» relay + 2 safety relays
- IP65 tightness
- Safety stop PL e EN ISO 13849 and SIL 3 EN 61508
- Bidirectional communication
- 64 frequencies in 433-434MHz
- 12 frequencies in 869MHz
- 64 frequencies in 911-918MHz
- Many options available :
  - 1 board with :
    - 2 logical inputs
    - 1 analog input
    - 1 analog output
    - 1 RTU slave RS485 Modbus interface
  - infrared
  - synchronisation of equipment
  - integrated horn...



## Nemo

### Communicating and compact Transceiver

- 1 logic input
- 2 PL c per EN 13849 relay outputs
- 1 RTU slave RS485 Modbus interface
- 1 CANopen interface
- IP65 tightness
- Safety stop PL e EN ISO 13849 and SIL 3 EN 61508
- Bidirectional communication
- 64 frequencies in 433-434MHz
- 12 frequencies in 869MHz
- 64 frequencies in 911-918MHz
- Many communication bus network options :
  - RS485 PROFIBUS / PROFINET 
  - RS485 DEVICENET 
  - Real-time deterministic Ethernet POWERLINK  industrial network
  - Ethernet/IP 
  - EtherCAT 
  - Modbus TCP/IP 
- Other options :
  - infrared,
  - synchronisation of equipment,
  - recovery control by cable link...





**CE 0081 Ex**  
 II 1 G D  
 Ex ia IIB T4 or 145°C Ga (1)  
 Ex ia IIIC T135°C or T145°C Da (1)  
 II 2 G D  
 Ex ia IIC T4 or 145°C Gb (1)  
 Ex ia IIIC T135°C or T145°C Db (1)  
 IM1  
 Ex ia I Ma  
 LCIE 14 ATEX 3055 X  
 IECEx LCIE 14.0049 X

## Beta ATEX IECEx



### Compact, easy to handle, flexible Operator module

2 or 6 function buttons + 2 navigation buttons  
 + start/validation + stop  
 3 different button types available  
 IP65 tightness Operator module  
 Integrated or Plug-in rechargeable battery  
 Safety stop PL e EN ISO 13849 and SIL 3 EN 61508  
 Bidirectional communication  
 64 frequencies in 433-434MHz  
 12 frequencies in 869MHz  
 64 frequencies in 911-918MHz  
 Many options available :  
 • buzzer...



**CE 0081 Ex**  
 II 1 G D  
 Ex ia IIB T4 or 145°C Ga (1)  
 Ex ia IIIC T135°C or T145°C Da (1)  
 II 2 G D  
 Ex ia IIC T4 or 145°C Gb (1)  
 Ex ia IIIC T135°C or T145°C Db (1)  
 IM1  
 Ex ia I Ma  
 LCIE 15 ATEX 3055 X  
 IECEx LCIE 15.0045 X

## Gama ATEX IECEx



### Robust, Ergonomic, Secure Operator module

6 or 10 function buttons + 2 navigation buttons  
 + start/validation + stop  
 3 different button types available  
 IP65 tightness Operator module  
 Plug-in rechargeable battery  
 Function buttons designed to SIL 2 per EN 61508 and  
 PL d per EN ISO 13849  
 Safety stop PL e EN ISO 13849 and SIL 3 EN 61508  
 Bidirectional communication  
 64 frequencies in 433-434MHz  
 12 frequencies in 869MHz  
 64 frequencies in 911-918MHz



**CE 0081 Ex**  
 II 1 G D  
 Ex ia IIB T4 or 145°C Ga (1)  
 Ex ia IIIC T135°C or T145°C Da (1)  
 II 2 G D  
 Ex ia IIC T4 or 145°C Gb (1)  
 Ex ia IIIC T135°C or T145°C Db (1)  
 IM1  
 Ex ia I Ma  
 LCIE 15 ATEX 3058 X  
 IECEx LCIE 15.0047 X

#### With cable link option :

**CE 0081 Ex**  
 II 1 G D  
 Ex ia IIB T4 or 145°C Ga (1)  
 Ex ia IIIC T135°C or T145°C Da (1)  
 IM1  
 Ex ia I Ma  
 Ui : 8V; Pi : 310mW;  
 Ci : 96.2µF; Li : 0.54µH;  
 LCIE 15 ATEX 3058 X  
 IECEx LCIE 15.0047 X

## Pika ATEX IECEx



### Compact, Ergonomic Operator module

1 or 2 joysticks + 4 or 6 function buttons  
 + 2 navigation buttons + start/validation + stop  
 6 different button types available  
 IP65 tightness Operator module  
 Plug-in rechargeable battery  
 Safety stop PL e EN ISO 13849 and SIL 3 EN 61508  
 Bidirectional communication  
 64 frequencies in 433-434MHz  
 12 frequencies in 869MHz  
 64 frequencies in 911-918MHz  
 Many options available :  
 • recovery control by cable link...



**CE 0081 Ex**  
 II 1 G D  
 Ex ia IIB T4 or 145°C Ga (1)  
 Ex ia IIIC T135°C or T145°C Da (1)  
 IM1  
 Ex ia I Ma  
 LCIE 14 ATEX 3014 X  
 IECEx LCIE 14.0015 X

#### With cable link option :

**CE 0081 Ex**  
 II 1 G D  
 Ex ia IIB T4 or 145°C Ga (1)  
 Ex ia IIIC T135°C or T145°C Da (1)  
 IM1  
 Ex ia I Ma  
 Ui : 5.9V; Ii : 210mA; Pi : 310mW;  
 Ci : 96.2µF; Li : 0.54µH  
 LCIE 14 ATEX 3014 X  
 IECEx LCIE 14.0015 X

## Moka ATEX IECEx



### Modular, multifunction Operator module

2, 3 joysticks or 6 levers + 4 to 16 function buttons  
 + 2 navigation buttons + start/validation + stop  
 6 different button types available  
 IP65 tightness Operator module  
 Plug-in rechargeable battery  
 Safety stop PL e EN ISO 13849 and SIL 3 EN 61508  
 Bidirectional communication  
 64 frequencies in 433-434MHz  
 12 frequencies in 869MHz  
 64 frequencies in 911-918MHz  
 Many options available :  
 • recovery control by cable link...

(1) Temperature classes depending on Tamb:  
 -20°C ≤ Tamb ≤ +40°C, temperature classes are T4 for gas and T135°C for dust.  
 +40°C ≤ Tamb ≤ +50°C, temperature classes are T45°C for gas and T145°C for dust.



**CE 0081 Ex**  
II 2 GD  
Ex d IIB T6 Gb  
Ex tb IIIC T85°C Db  
LCIE 15 ATEX 3023 X  
IECEx LCIE 15.0025 X

## Elio ATEX IECEx



### Optimised and open-ended Transceiver

12 function relays + 1 «On» relay + 2 safety relays  
IP66 tightness  
Safety stop PL e EN ISO 13849 and SIL 3 EN 61508  
Bidirectional communication  
64 frequencies in 433-434MHz  
12 frequencies in 869MHz  
64 frequencies in 911-918MHz  
Many options available :

- 1 board with :
  - 2 logical inputs
  - 1 analog input
  - 1 analog output
  - 1 RTU slave RS485 Modbus interface
- synchronisation of equipment



**CE 0081 Ex**  
II 2 GD  
Ex d IIB T6 Gb  
Ex tb IIIC T85°C Db  
Um ≤250 VAC  
LCIE 14 ATEX 3005 X  
IECEx LCIE 14.0014 X

### With cable link option :

**CE 0081 Ex**  
II 2 (1) GD  
Ex d [ia Ga] IIB T6 Gb  
Ex tb [ia Da] IIIC T85°C Db  
Um ≤125 VAC  
Uo : 5.9V ; Io : 210mA, Po : 310mW  
Co : 1000µF ; Lo : 3.22mH,  
Lo/Ro : 460µH/Ω  
LCIE 14 ATEX 3005 X  
IECEx LCIE 14.0014 X

## Alto ATEX IECEx



### Modular and multifunction Transceiver

2 function relays + 2 safety relays  
1 logic input  
1 analog input  
1 RTU slave RS485 Modbus interface  
IP66 tightness  
Safety stop PL e EN ISO 13849 and SIL 3 EN 61508  
Bidirectional communication  
64 frequencies in 433-434MHz  
12 frequencies in 869MHz  
64 frequencies in 911-918MHz  
Many options available :

- Boards (3 slots available on mainboard) :
  - board with 12 function relays
  - board with 12 logic inputs + 2 analog inputs
  - board with 6 analog outputs + 1 bypass output
  - board with CANopen interface
- recovery control by cable link,
- synchronisation of equipment...

# UR

## Compact industrial remote control

4 function buttons + start + stop  
5 different button types available  
Electronic key  
Light-weight, compact transmitter  
IP65 tightness, protective foams  
Integrated rechargeable battery  
Transmitter support charger  
Safety stop PL d EN ISO 13849  
6 function relays + 1 «On» relay  
+ 2 safety relays  
64 frequencies in 433-434MHz  
Infrared start-up option



# Jump

## Secure active radio repeater

PL e EN ISO 13849 and SIL 3 EN 61508  
IP65 tightness  
Compatibility with UR, UD, RS Series  
64 frequencies in 433-434MHz



# Orion

## Simple industrial remote control

2, 4, 6, 8, 12 or 16 function buttons  
Versions with start/stop buttons  
Single step push buttons  
IP65 tightness transmitters and receivers  
Standard battery or rechargeable battery  
Transmitter support charger  
2, 4, 8 or 16 +1 relays  
1 or 18 frequencies in 433-434MHz  
Programmable operating mode



# UC-UD

## Modular industrial remote control

6, 8 or 10 function buttons + start + stop  
6 different button types available  
Electronic key  
IP65 tightness transmitter and receivers  
Plug-in rechargeable battery  
Safety stop PL d EN ISO 13849  
6, 12 or 18 function relays + 1 «On» relays + 2 safety relays  
64 frequencies in 433-434MHz  
12 frequencies in 869MHz  
64 frequencies in 911-918MHz  
Infrared start-up option  
Special functions



# Isis

## Radio logical signal transfers

8 logical signals  
IP65 tightness housings  
4 or 8 relays  
18 frequencies in 433-434MHz  
Programmable operating mode



# RS Wireless safety transmission system

## Wireless safety logic signal transmission system

10 logical signals + 1 safety signal  
PL e EN ISO 13849 and SIL 3 EN 61508  
DIN rail housings  
64 frequencies in 433-434MHz  
Infrared start-up option



# RS Wireless enabling handle

## Wireless enabling handle

4 function buttons + trigger with 2 or 3 positions  
Light-weight, compact and ergonomic transmitter  
IP54 tightness, protective foams  
Integrated rechargeable battery  
Charger support  
Safety stop PL e EN ISO 13849 and SIL 3 EN 61508  
6 static outputs + 2 safety relays  
64 frequencies in 433-434MHz  
Infrared start-up option



# RS Wireless emergency stop

## Wireless emergency stop system

4 function buttons + Start/Stop  
Light-weight, compact and ergonomic transmitter  
IP65 tightness, protective foams  
Integrated rechargeable battery  
Charger support  
Safety stop PL e EN ISO 13849 and SIL 3 EN 61508  
6 static outputs + 2 safety relays  
64 frequencies in 433-434MHz  
Infrared start-up option



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