

MODULAR

MULTIFUNCTION

Moka

TRANSMITTER

Moka transmitter adapts to the application to make the process more efficient. This easy-to-use remote control gives incomparable freedom of movement, high motion accuracy, and higher productivity while providing best operators' safety. With Moka transmitter, experience today's cutting-edge technology.

MAIN FEATURES

- > Configurable, smart bi-directional radio link to exchange information while adapting to the radio environment.
- > User-friendly screen display for look-up, selection, validation, configuration...
- > Modular unit with wide ranging choice of functions.
- > Quick and easy setup for application configuration thanks to **iDialog** software (labels, feedback, alarms, mapping actuators/outputs, interlocks, network features, access by PIN codes).
- > Easy to maintain thanks to its diagnosis aid system (on screen message, iDialog analysis software).
- > Plug-in battery and rugged industrial charger.

FULLY COMPLIANT WITH SAFETY AND SECURITY STANDARDS:

Machinery directive 2006/42/EC:
Emergency stop
> SIL 3 per EN 61508
> Performance level PL e
per EN ISO 13849-1 and -2
EC type certificate issued by TÜV
NORD



Radio and telecommunication terminal
equipment
(low voltage, electromagnetic
compatibility, radio spectrum)
FCC part 15
ARCEP certificate
Radio Equipment Directive (RED)

BIDIRECTIONAL
RADIO LINK

OPTIONAL STARTUP
VALIDATION BY IR
OPTIONAL WORK AREA
LIMITATION

MULTIMODES
OPTION

EMERGENCY STOP
PALMSWITCH
SIL 3 - PL e

TOUGH BACKLIT SCREEN
WITH
ANTI-REFLECTION,
SHOCK-PROOF,
ANTI-SCRATCHING
FEATURES

FUNCTION LABELS

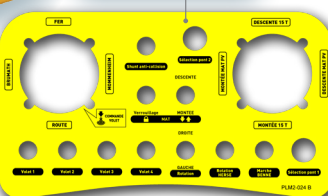
2-JOYSTICK MODEL

OPTIONAL
CROSS-LOCKING SYSTEM

STANDARD
JOYSTICKS WITH
1 TO 4 NOTCHES
OR PROPORTIONAL
CONTROL

OPTIONAL
INTENTIONAL-
ACTION JOYSTICKS

OPTIONAL
PERSONALIZED
FRONT PLATE



POSITIONS
FOR SWITCHES
IN THE CHOICE

4 FUNCTION
BUTTONS

ON / VALIDATION BUTTON

NAVIGATION
BUTTONS

3-JOYSTICK MODEL

OPTIONAL
AUXILIARY PUSHBUTTON

OPTIONAL
C16 4 POINTS CONNECTOR TO
CONNECT TWO DRY CONTACTS

OPTIONAL
C16 7 POINTS INDUSTRIAL
CONNECTOR FOR WIRE
CONNECTION

OPTIONAL
AUTOMATIC DETECTION
OF INACTIVITY
«DEAD MAN»

6-PROPORTIONAL LEVERS MODEL

OPTIONAL
VIBRATOR (ALARM)

BREATHABLE MEMBRANE
TO PREVENT
CONDENSATION

SEALED USB PORT
FOR DIAGNOSIS,
CONFIGURATION

HIGH-CAPACITY
PLUG-IN BATTERY

DESCRIPTION

The transmitter comes with:

- **Transmitter^(a) with 2 joysticks:**
4 function pushbuttons^(b)
+ 12 positions additional switches^(c)
- **Transmitter^(a) with 3 joysticks:**
4 function pushbuttons^(b)
+ 8 positions for additional switches^(c)
- **Transmitter^(a) with 6 proportional levers:**
4 function pushbuttons^(b)
+ 8 positions for additional switches^(c)
- **Autres configurations en spécial**

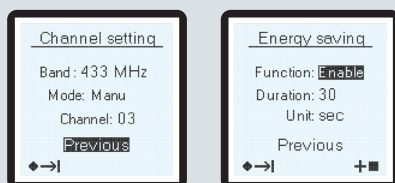
^(a) Each version has 2 navigation pushbuttons, 1 On / Validation» pushbutton and 1 emergency stop palmswitch.

^(b) The pushbuttons can be configured as selectors for 2, 3 or «n» positions with status indication on the screen.

^(c) Choose among the following control components:

- key selector switches
- selector switches with 2 fixed positions
- 2-position buttons with return to initial position
- selector switches with 3 fixed positions
- 3-position buttons with return to initial position
- 3-position buttons with 2 fixed positions + 1 return to initial position
- rotary selector switches with 4 to 12 positions
- potentiometer (for 2-joystick model)

The screen on the transmitter allows configuring easily and choosing items such as:



- > Screen language
- > Receiver which you want to use
- > Radio transmit frequency and power
- > Duration of the « standby » time delay (automatically stops transmitter and associated receiver if not used for a defined period of time)
- > Operating modes of the equipment (32 max.)

It also allows to view:

- Battery charge level
- Radio communication
- Equipment labels and controlled functions (max 96 different labels for selectors)
- Equipment feedback (16 feedbacks max with 10 labels / feedback - 48 labels max in total)
- Alarms (8 for application use + 8 for system)

Compatibility:

These transmitters work with **Elio**, **Alto**, **Timo** and **Nemo** receivers to be defined according the application.

TECHNICAL CHARACTERISTICS

MECHANICAL CHARACTERISTICS AND ENVIRONMENTAL WITHSTAND CAPACITY

Housing material	shock-proof polyamide
Water tightness	IP65
Weight (with battery)	from 1700 g to 1800 g depending on configurations
Dimensions	297 x 215 x 170 mm
Carried	by carrying belt by 2-point shoulder strap

ENVIRONMENTAL WITHSTAND CAPACITY

Operating temperature	-20°C to + 50°C
Storage temperature without battery	-20°C to + 70°C
Battery storage temperature	-20°C to + 50°C

ELECTRICAL AND RADIO CHARACTERISTICS

Power supply	Li-Ion battery
Autonomy (25°C) with radio activated	10 hours
100% time	
Frequency selection	64 frequencies for 433-434 MHz band
Manual / automatic	12 frequencies for 869 MHz band 64 frequencies for 911-918 MHz band
Emission power	<10 mW (license free)
Range limitation	10 selectable levels of power
Modulation	FM
Average range ⁽¹⁾	100 m in industrial space ⁽¹⁾ 300 m in open space ⁽¹⁾
Charging time (autonomy > 80%)	3 hr (20 mn of charge get 1 hr autonomy)
Charging temperature range	0°C to + 40°C

FUNCTIONAL CHARACTERISTICS

Display	Backlit LCD display, 128 x 128 pixels 42 mm (W) x 40 mm (H)
USB interface for configuration and diagnosis	mini-B 5-point USB connector Easy access in a compartment on the back side of the transmitter
Operating indications	On screen (radio link status, battery status, status of buttons, information feedbacks...)
Function buttons	4 pushbuttons (mounted around the screen) + up to 12 positions for switches depending on number of joysticks
Navigation and startup buttons	2 pushbuttons to configure the product 1 On / Validation button (for startup and validation of menus on screen)
Emergency stop	2 positions with rotary unlock system
Standby function	User-defined time delay (from 1 s to infinity)

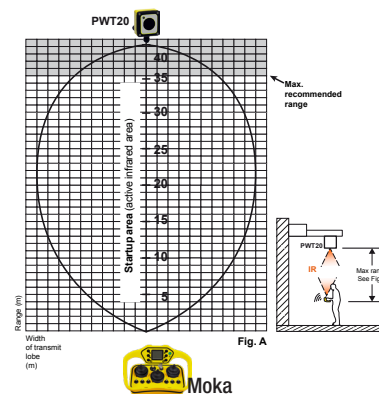
⁽¹⁾ Range varies according to environment conditions around transmitter and reception antenna (steel works, metal walls, etc.).

ADDITIONAL OPTIONS

STARTUP VALIDATION BY IR

Startup of the remote-controlled equipment can be secured by adding an IR startup feature.

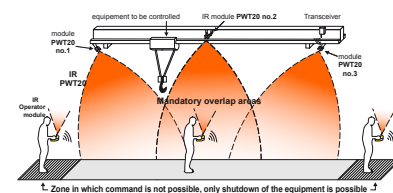
- To start the equipment, the operator must point the module in the direction of the PWT20 IR module(s) mounted on the equipment to control. The "Transmitter / Equipment controlled" match-up takes place with no possibility of error.
- The IR startup feature has a range of 35 m (see fig. A).



LIMITATION OF WORK AREA BY INFRARED

The transmitter features an IR emission function which detects an operator in the IR working area. Operator safety is ensured since the operator is required to work in the IR area.

The maximum guaranteed work distance between the PWT20 IR modules and the operator module is 35 meters.



C16 INDUSTRIAL CONNECTOR FOR 2 DRY CONTACTS

- 4 connection terminals
- switching capacity < 10 mA
- female socket
- supplied with cap

C16 INDUSTRIAL CONNECTOR FOR WIRE CONNECTION

- 7 connection terminals
- male socket
- supplied with cap

ACCESSORIES



Battery charger

Reference: PWC

Dimensions: 170 x 65 x 36 mm

Power supply: 12/24 VDC

Power: 7 W

Plug-in battery for transmitter

Reference: PWB

Dimensions: 57 x 56 x 16 mm

Voltage: 3,7 V

Capacity: 1900 mA

Technology: lithium ion



Mains adapter for battery charger

Reference: UBCU

Dimensions: 41 x 72 x 39 mm

Power supply: 115-230 VAC

Output: 12 VDC

Power: 7 W



Cigarette lighter plug adapter for battery charger

Reference: PWA4

Dimensions: 90 x 20 x 20 mm

Power supply: 12-24VDC

Output: Power supply



Removable shoulder strap

Reference: UWE102



Carrying belt

Reference: PWM103



Key switch No. 2D138 diameter 22 for cabinet

Reference: PWE01



Cable for wire connection between transmitter and receiver

Reference: PWL010

Length: 10 meters

Equipped with a C16 female connector on one side and a C16 male connector on the other side

C16 male 4 points industrial connector Kit to be screwed

Reference: PWM202

JAY

ZAC La Bâtie
Rue Champrond
F 38334 SAINT-ISMIER France
Tel. +33 (0)4 76 41 44 00
www.jay-electronique.com

A company of

CONDUCTIX
wamplifier

Not all products shown on this leaflet may be available in your area: please contact your Conductix-Wamplifier office.