

COMPACT

ERGONOMIC

Pika

TRANSMITTER

Pika 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 Pika 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...
- > Compact, super-ergonomic unit.
- > 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 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

OPTIONAL
CROSS-LOCKING
SYSTEM

OPTIONAL
PERSONALIZED FRONT
PLATE

STANDARD
JOYSTICKS WITH
1 TO 4 NOTCHES
OR PROPORTIONAL
CONTROL

OPTIONAL SECURE
INTENTIONAL-ACTION
JOYSTICKS

EMERGENCY STOP
PALMSWITCH
SIL 3 - PL e

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

MULTIMODES
OPTION

EMERGENCY STOP
PALMSWITCH
SIL 3 - PL e

4 FUNCTION
BUTTONS

ON / VALIDATION
BUTTON

NAVIGATION
BUTTONS

POSITIONS FOR
« TOGGLE »
SWITCHES

1-JOYSTICK MODEL

OPTIONAL
INDUSTRIAL
CONNECTOR
C16 / 4 POINTS
TO CONNECT
2 DRY CONTACTS
OR
C16 / 7 POINTS
FOR WIRE
CONNECTION
WITH TIMO, NEMO, ALTO

OPTIONAL
AUXILIARY
PUSHBUTTON

OPTIONAL
AUTOMATIC DETECTION
OF INACTIVITY
«DEAD MAN»

2-JOYSTICK MODEL

FUNCTION LABELS

SEALED USB
INTERFACE
FOR DIAGNOSIS,
CONFIGURATION

HIGH-CAPACITY
PLUG-IN BATTERY

OPTIONAL VIBRATOR
(ALARM)

BREATHABLE MEMBRANE
TO PREVENT CONDENSATION

DESCRIPTION

The transmitter comes with:

- > **Transmitter^(a) with 1 joystick or 2 joysticks:**
4 function pushbuttons^(b)
+ 2 positions for additional switches^(c)

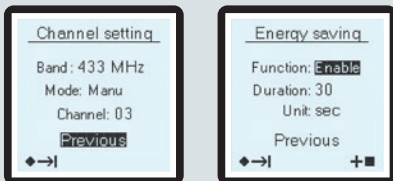
^(a) Each version has 2 navigation pushbuttons, 1 «On/Validation» pushbutton and 1 emergency stop palmswitch.

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

^(c) You can choose from 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

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



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

It also displays:

- 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, Nemo** receivers to be defined according the application.

TECHNICAL CHARACTERISTICS

MECHANICAL CHARACTERISTICS AND ENVIRONMENTAL WITHSTAND CAPACITY

Housing material	shock-resistant polyamide
Water tightness	IP65
Weight (with battery)	1 joystick: 1300 g 2 joysticks: 1400 g
Dimensions	243 x 180 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 100 % time	10 hours
Frequency selection	64 frequencies for 433-434 MHz 12 frequencies for 869 MHz 64 frequencies for 911-918 MHz 64 frequencies for 2.4 GHz
Manual / automatic	
Emission power	< 10 mW (license free)
Range limitation	10 selectable levels of power
Modulation	FM or LoRa with 2.4 GHz
Average range ⁽¹⁾	100 m in industrial environment ⁽¹⁾ 300 m in open space ⁽¹⁾ 80 m-300 m band 2.4 GHz in industrial environment ⁽¹⁾ 800 m-2 Km band 2.4 GHz in open space ⁽¹⁾
Charging time (autonomy > 80 %)	3 hr (20 mn of charge get 1hr 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 level side of transmitter
Operating indications	On screen (radio link status, battery status, status of buttons, information feedbacks...)
Function buttons	4 pushbuttons (mounted around the screen) + 2 positions for switches
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.).

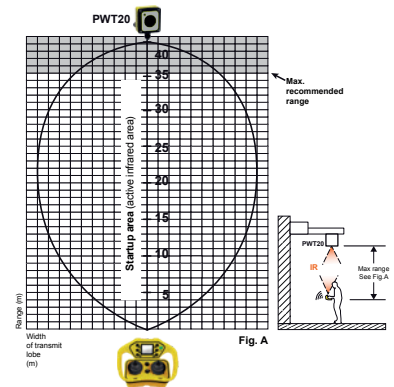
ADDITIONAL OPTIONS

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.

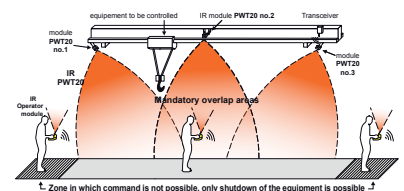
- The IR startup feature has a range of 35 m (see fig. A).



LIMITATION OF ACTION 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 PWT20 IR modules and the transmitter 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

Reference	Description	Picture
UWE102	Removable 2-points shoulder strap	
PWM103	Carrying belt	
PWM112	Carrying harness for Pika or Moka transmitter	
PWC	Charger for PWB plug-in battery Dimensions : 170 x 65 x 36 mm Power supply 12/24 Vdc, 7 W	
PWCPM01	Docking Station Pika/Moka with 2 Relays + 1 logical input + Buzzer Dimensions : 274 x 159 x 170 mm Power supply 12/24 Vdc, 7W Warning, compatible with all Pika & Moa transmitter equipped with charging contacts	
PWB	Supplementary plug-in battery 3.7 V 2200 mA lithium Ion (for Beta 6) Dimensions : 57 x 56 x 16 mm Voltage: 3.7 V Capacity: 1900 mAh	
UBCU	110-240 Vac / 12 Vdc Adapter with European, UK and US plugs For charger PWC, PWCPM01	
PWA4	Cigarette lighter socket 12-24 Vdc. For charger PWC, PWCPM01	
PWL010	10 m cable for wired link	
PWT17	Female M12 connector 4/5 pins with 2 m cable - Auxiliary Beta plug - M12 Timo Plug	
PWE01	Rotary switches 2 positions with standard metal key "Pika-Moka" for metal box	
UWE002	4 self-adhesive directional colored arrows (4 x 122 x 180 mm)	
UWE202	6 label kit arrows color	
UWE205	48 blank label kit	
UWE207	Kit 90 labels buttons black & white	

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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
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 Radio Equipment Directive (RED)



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

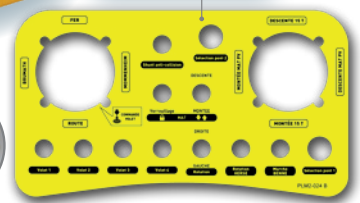


BIDIRECTIONAL
RADIO LINK

OPTIONAL
CROSS-LOCKING SYSTEM

2-JOYSTICK MODEL

OPTIONAL
PERSONALIZED
FRONT PLATE



STANDARD
JOYSTICKS WITH
1 TO 4 NOTCHES
OR PROPORTIONAL
CONTROL



OPTIONAL
INTENTIONAL-
ACTION JOYSTICKS



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

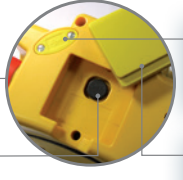
OPTIONAL
C16 7 POINTS INDUSTRIAL
CONNECTOR FOR WIRE
CONNECTION

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

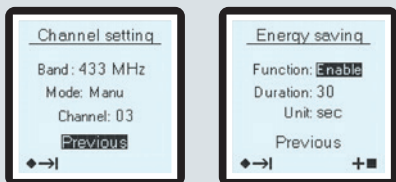
DESCRIPTION

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 palm-switch.
^(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 100 % time	10 hours
Frequency selection	11 frequencies for 418-419 MHz
Manual / automatic	64 frequencies for 433-434 MHz 12 frequencies for 869 MHz 64 frequencies for 911-918 MHz 64 frequencies for 2.4 GHz
Emission power	<10 mW (license free)
Range limitation	10 selectable levels of power
Modulation	FM or LoRa with 2.4 GHz
Average range ⁽¹⁾	100 m in industrial environment ⁽¹⁾ 300 m in open space ⁽¹⁾ 80 m-300 m band 2.4 GHz in industrial environment ⁽¹⁾ 800 m-2 Km band 2.4 GHz in open space ⁽¹⁾
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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)

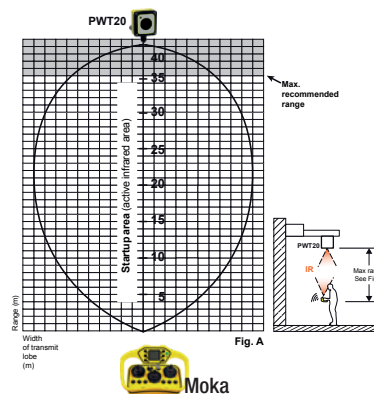
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ADDITIONAL OPTIONS

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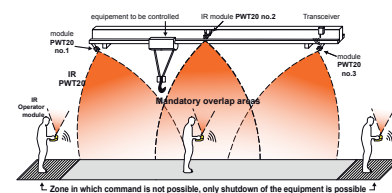
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- The IR startup feature has a range of 35 m (see fig. A).



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

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UWE205	48 blank label kit	
UWE207	Kit 90 labels buttons black & white	

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