

**COMPACT**

**ERGONOMIC**



# Pika

## OPERATOR MODULE

The Pika operator module adapts to your application to make your process more efficient. This easy-to-use module gives you incomparable freedom of movement, precise quality manoeuvres, and higher productivity while ensuring your operators' safety. With the Pika operator module, experience today's cutting-edge technology.

### MAIN FEATURES

- Configurable, intelligent bi-directional radio link exchanges 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 diagnostic aid system (information on screen, iDialog analysis software).
- Plug-in battery and industrial charger.

### FULLY COMPLIANT WITH EUROPEAN DIRECTIVES :

**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



No 44 250 11 382580 004

**Radio and telecommunication terminal equipment**  
(low voltage, electromagnetic compatibility, radio spectrum)  
R&TTE 99/5/CE  
ARCEP certificate

BIDIRECTIONAL  
RADIO LINK

OPTION  
STARTUP BY IR  
VALIDATION

OPTION  
ACTION AREA  
LIMITATION

OPTIONAL  
CROSS-LOCKING  
SYSTEM

STANDARD  
JOYSTICKS WITH  
1 TO 4 NOTCHES  
OR PROPORTIONAL  
CONTROL

OPTION  
PERSONALIZED  
FRONT PLATE

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

OPTIONAL  
MULTIMODES

OPTIONAL SECURE  
INTENTIONAL-ACTION  
JOYSTICKS

EMERGENCY STOP  
PALMSWITCH  
SIL 3 - PL e

POSITIONS FOR  
« TOGGLE » CONTROL  
COMPONENTS

1-JOYSTICK  
MODEL

4 FUNCTION  
BUTTONS

ON/VALIDATION  
BUTTON

NAVIGATION  
BUTTONS

OPTION  
INDUSTRIAL  
CONNECTOR  
C16 / 4 POINTS  
FOR CONNECTING  
TWO DRY CONTACTS  
OR  
C16 / 7 POINTS  
FOR WIRE  
CONNECTION

OPTIONAL  
AUXILIARY  
PUSHBUTTON

OPTION  
AUTOMATIC  
DETECTION OF  
INACTIVITY  
« DEAD MAN »  
OPTIONAL  
ISOLATED WORKER  
ALARM SYSTEM

2-JOYSTICK  
MODEL

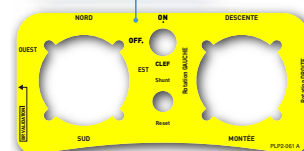
OPTIONAL VIBRATOR  
(ALARM)

BREATHABLE MEMBRANE  
PREVENTS CONDENSATION

FUNCTION LABELS

SEALED USB  
INTERFACE  
FOR DIAGNOSTICS,  
CONFIGURATION

HIGH-CAPACITY  
PLUG-IN BATTERY



## DESCRIPTION

The operator module comes in two housing versions:

- **Operator module<sup>[a]</sup> with 1 joystick:**  
4 function pushbuttons<sup>[b]</sup>  
+ 2 positions for control components of your choice<sup>[c]</sup>
- **Operator module<sup>[a]</sup> with 2 joysticks :**  
4 function pushbuttons<sup>[b]</sup>  
+ 2 positions for control components of your choice<sup>[c]</sup>

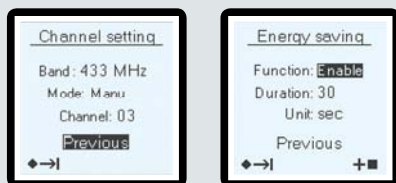
<sup>[a]</sup> Each version has 2 navigation pushbuttons, 1 «On/Validation» pushbutton and 1 emergency stop palmswitch.

<sup>[b]</sup> The single-action pushbuttons can be configured as selectors for 2, 3 or «n» positions with status indication on the screen.

<sup>[c]</sup> 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 operator module allows you to easily configure and choose items such as :



- The screen language
- The transceiver which you want to use
- The radio transmit frequency and power
- The duration of the « standby » time delay (Automatically stops operator module and associated transceiver if not used for a defined period of time)
- The different 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 max feedback with 10 labels / feedback and max 48 labels in total)
- Alarms (8 for application use + 8 for system)

## Compatibility:

These operator modules work with **Elio**, **Alto**, **Timo** transceivers to be defined according the application.

## TECHNICAL CHARACTERISTICS

## MECHANICAL CHARACTERISTICS AND ENVIRONMENTAL WITHSTAND CAPACITY

Housing material	shock-resistant polyamide
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 range	-20°C to +50°C
Storage temperature range of housing alone	-20°C to +70°C
Storage temperature range of battery	-20°C to +50°C

## ELECTRICAL AND RADIO CHARACTERISTICS

Power supply	Li-ion battery
Endurance (25°C) of radio link, activated 100% time	10 hours
Frequency selection	64 frequencies on 433-434 MHz band 12 frequencies on 869 MHz band
Manual / automatic	64 frequencies on 911-918 MHz band
Transmit power	<10 mW
Range limitation	10 power levels, configurable
Modulation	FM
Average range <sup>[1]</sup>	100 m in industrial space <sup>[1]</sup> 300 m in open space <sup>[1]</sup>
Charging time (endurance > 80%)	3 H (20 mn of charge get 1h autonomy)
Charging temperature range	0°C to +40°C

## FUNCTIONAL CHARACTERISTICS

Display	Backlit LCD display, 128 x 128 pixels 42mm (L) x 40mm (H)
USB interface for configuration and diagnostics	mini-B 5-point USB connector Easily accessible by cover on back of operator module
Operating indications	Visible on screen (radio link status, battery status, status of buttons, information feedback ...)
Function buttons	4 pushbuttons (mounted around the screen) + 2 positions for control components of your choice according to 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-definable time delay (from 1 s to infinity)

<sup>[1]</sup> Range varies according to environment conditions around operator module and reception antenna (steel works, metal walls, etc.).

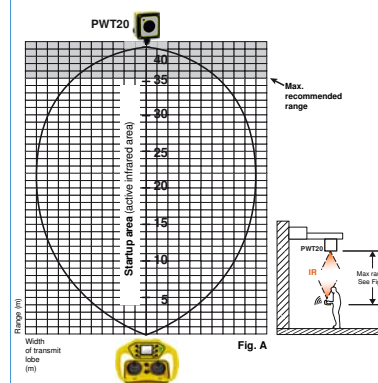
## ADDITIONAL OPTIONS

## STARTUP BY IR VALIDATION

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 be controlled. The "Operator module / Equipment controlled" match-up takes place with no possibility of error.

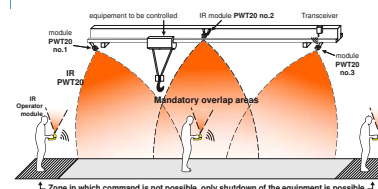
- The IR startup feature has an action range of 0 to 35 m (see fig. A).



## LIMITATION OF ACTION AREA BY INFRARED

The operator module is equipped with 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 range guaranteed between the PWT20 IR modules and the operator module is 35 meters.



## C16 INDUSTRIAL CONNECTOR FOR 2 DRY CONTACTS

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

## C16 INDUSTRIAL CONNECTOR FOR WIRE CONNECTION

- 7 connection points
- male socket
- supplied with cap



## ACCESSORIES



### Battery charger

Reference : PWC  
Dimensions : 170x65x36 mm  
Power supply : 12/24 VDC  
Power : 7w

### Plug-in battery for operator module

Reference : PWB  
Dimensions : 57x56x16 mm  
Voltage : 3,7V  
Capacity : 1900mA  
Technology : lithium Ion



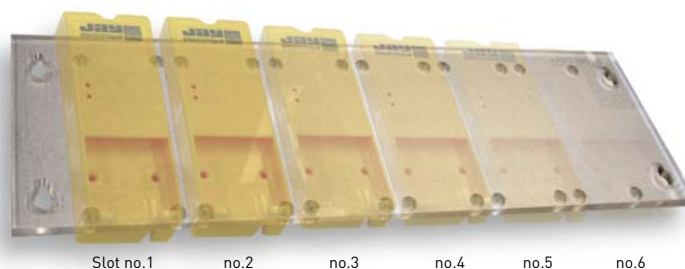
### Mains adapter for battery charger

Reference : UBCU  
Dimensions : 41x72x39 mm  
Power supply : 115-230VAC  
Output : 12VDC  
Power : 7 w



### Cigarette lighter plug adapter for battery charger

Reference : PWA4  
Dimensions : 90x20x20 mm  
Power supply : 12-24VDC  
Output : Power supply



### Rack for battery chargers (6 positions)

Sold without charger

Reference : PWR  
Dimensions : 470x147x8 mm

### Mains power adapter for rack

Reference : PWAUR  
Power supply : 100-240VAC  
Output : 12VDC  
Power : 36 w



### Removable shoulder strap

Reference : UWE102



### Carrying belt

Reference : PWM103



### Key switch No. 2D138 diameter 22 for cabinet

Reference : PWE01



### Cable for wire connection between operator module and transceiver

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



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