

**COMPACT**

**EASY TO HANDLE**

**FLEXIBLE**



# Beta

## OPERATOR MODULE

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

### MAIN FEATURES

- Configurable, intelligent bi-directional radio link to exchange information while adapting to the radio environment.
- User-friendly screen for look-up, selection, validation, configuration...
- Compact, easy-to-handle casing for one-hand control.
- 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).
- 2 charging modes possible (on 6 + 4 model):
  - Rugged industrial charger for operator module,
  - Rugged industrial charger for battery.

### 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 001

Radio and telecommunication terminal equipment

(low voltage, electromagnetic compatibility, radio spectrum)  
 R&TTE 99/5/CE  
 ARCEP certificate



## DESCRIPTION

The operator module comes in two housing versions :

→ « 2+ 4[a] »<sup>[a]</sup> operator module with 2 function buttons<sup>[b]</sup> :

- 2 single-action pushbuttons

OR 2 double-action pushbuttons

→ « 6+ 4 »<sup>[a]</sup> operator module with 6 function buttons<sup>[b]</sup> :

- 6 single-action pushbuttons

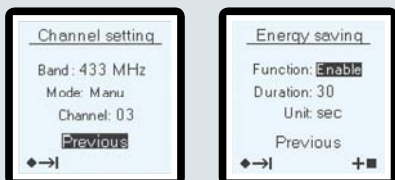
OR 6 double-action pushbuttons

OR 4 double-action pushbuttons + 2 single-action pushbuttons (under the navigation buttons)

<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.

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 reinforced ABS
Tightness	IP65
Weight (with battery)	2 buttons : 400 g 6 buttons : 485 g
Dimensions	2 buttons : 182 x 75 x 50 mm 6 buttons : 235 x 75 x 50 mm
Stowed	on charger support
Carried	in carrying sleeve by 2-point shoulder strap by 3-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 12 frequencies on 869 MHz 64 frequencies on 911-918 MHz
Manual / automatic	
Transmit power	< 10 mW (license free)
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, 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 contact of operator module
Operating indications	Visible on screen (radio link status, battery status, status of buttons, information feedback...)
Function buttons	2 or 6 pushbuttons (available as single or double-action buttons and configurable as selectors with n positions)
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.).

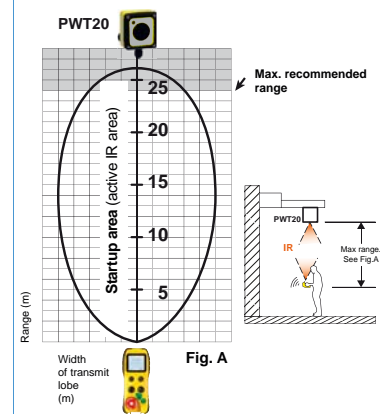
## ADDITIONAL OPTIONS

### 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.

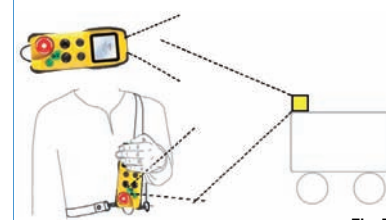
- The IR startup feature has an action range of 0 to 24 m (see fig. A).



### 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 22 meters (See fig.A) or 8 meters (See fig.B).



### C16 INDUSTRIAL CONNECTOR FOR 2 DRY CONTACTS

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

## ACCESSORIES



### Standard charger for Beta 2 or Beta 6 operator modules

#### Standard version references

PWCB020

PWCB060

Dimensions : • 220x82x76 mm  
• 272x82x76 mm

Power supply : 12/24 VDC  
Power : 7w

#### References for version with 2 relays + 1 logic input + buzzer

PWCB021

PWCB061

#### References version with 1 relay + 4 logic inputs + buzzer

PWCB022

PWCB062

#### Mechanical support for operator Beta 6 Module

Reference : PWCB06M

Dimensions: 272x82x76 mm

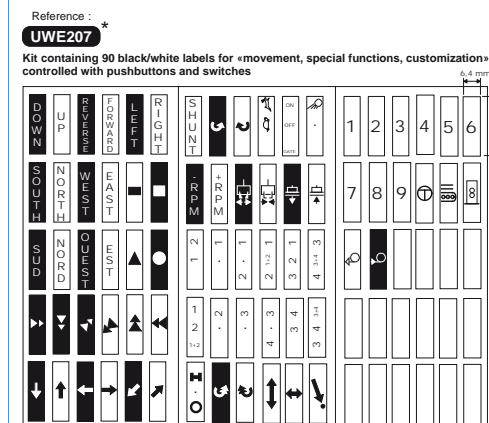
#### M12 female 4/5 points cable

Reference : PWM201

Length : 2 m

#### Sheet of adhesive labels for operator module :

The button functions are identified by adhesive labels in the recesses provided in the operator module casing next to the pushbuttons.



\* = standard sheet of labels supplied with operator module

### Battery charger

Reference : PWC

Dimensions: 170x65x36 mm

Power supply : 12/24 VDC

Power : 7w

#### Plug-in battery for Beta 6 operator module

Reference : PWB

Dimensions : 57x56x16 mm

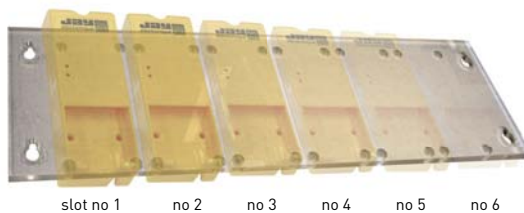
Voltage : 3,7V

Capacity : 1900mAh

#### Built-in battery for Beta 2 operator module

Voltage : 3,7V

Capacity : 1700mAh



### Mains power adapter for battery charger

Reference : UBCU

Dimensions : 41x72x39 mm

Power supply : 100-240VAC

Output : 12VDC

Power : 7 w



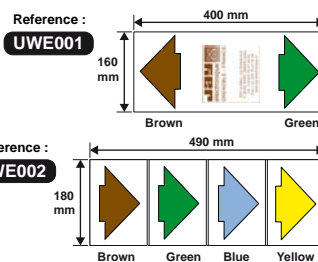
### Cigarette lighter plug adapter for battery charger

Reference : PWA4

Dimensions : 90x20x20 mm

Power supply : 12-24VDC

Output : Power supply



### Rack for battery chargers (6 slots)

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 2-point shoulder strap

Reference : UWE102

### Removable 3-point shoulder strap

Reference : UWE104

### Carrying sleeve for Beta 2 module

Reference : PWM107

### Carrying sleeve for Beta 2 module

Reference : PWM108

### Carry strap wrist

Reference : PWM111

### Protective Case for Beta 6

Reference : PWM106

### Cover and protection for carrying Beta 6

Reference : PWM102



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