

ROBUST

SECURE

ERGONOMIC



Gama

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

MAIN FEATURES

- > Configurable, smart bi-directional radio link exchanges information while adapting to the radio environment.
- > User-friendly screen for look-up, selection, validation, configuration...
- > Ergonomic casing and buttons, even when wearing thick gloves.
- > Function buttons designed to SIL 2 per EN 61508 and PL d per EN ISO 13849.
- > 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).
- > 2 charging modes on Gama:
- Rugged industrial charger for operator module,
- Rugged industrial charger for battery.

FULLY COMPLIANT WITH SAFETY AND SECURITY STANDARDS:

Machinery directive 2006/42/EC:

- > 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

adio Equipment Directive (RED)

PLUG-IN BATTERY

SIL 3 - PL e







DESCRIPTION

The transmitter comes in two versions:

- > «6+2»(a) transmitter with 6 function buttons(b):
 - 6 single-action pushbuttons
 - OR 6 double-action pushbuttons
 - OR 4 double-action pushbuttons
 - + 2 single-action pushbuttons (under the display)
- > **«10 +2»**(a) **transmitter** with 10 function buttons(b):
 - 10 single-action pushbuttons
 - 10 double-action pushbuttons
 - OR 6 double-action pushbuttons
 - or + 4 single-action pushbuttons (under the display)
 - OR 8 double-action pushbuttons
 - + 2 single-action pushbuttons (under the display)
- (a) Each version has 2 navigation pushbuttons.
- (b) 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 transmitter allows configurating 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 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 max labels 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 reinforced ABS
Water tightness	IP65
Weight (with battery)	6 buttons: 768 g
-	10 buttons: 893g
Dimensions	6 buttons: 290 x 93 x 64 mm
	10 buttons: 360 x 93 x 64 mm
Storage	on charger support
Carried	by 2-point shoulder strap

ENVIRONMENTAL WITHSTAND CAPACITY

Operating temperature range	-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 link 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 environment (1)
	300 m in open space (1)
Charging time (endurance > 80%)	3 hr (20 mn of charge provides 1hr autonomy)
Charging temperature range	0°C to + 40°C

FUNCTIONAL CHARACTERISTICS

Display	Backlit LCD, 128 x 128 pixels
	42mm (W) x 40mm (H)
USB interface for	mini-B 5-contact USB connector
configuration and	Easy access in a compartment on the backside
diagnosis	of transmitter
Operating indications	Displayed on screen (radio link status,
	battery status, status of buttons,
	information feedbacks)
Function buttons	6 or 10 pushbuttons (available as single
	or double-action buttons
	and configurable as selectors with n positions)
	Ø 14 mm - travel 7 mm
	Endurance :
	1 million cycles for 1st level pushbutton action
	500 000 cycles for 2nd level pushbutton action
Navigation and	2 pushbuttons to
startup buttons	configure the product (above the
	emergency stop palmswitch)
	On / Validation button (for startup
	and validation of menus on screen)
	Endurance:
	500 000 cycles
Emergency stop	2 positions with rotary unlock system
Standby function	User-defined time delay
	(from 1 s to infinity)

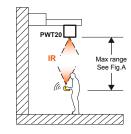
⁽¹⁾ Range varies according to environment conditions around transmitter and reception antenna (steel works, metal walls, etc. . . .).

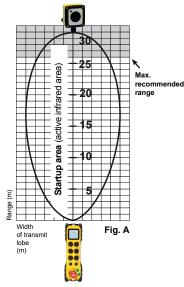
ADDITIONAL OPTIONS

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 26 m (see fig. A).





ACCESSORIES



Standard charger for Gama 6+2 or Gama 10+2 tranmitters

References for basic version

PWCG060 PWCG100

Dimensions: • 355 x 94 x 96 mm

• 428 x 94 x 96 mm

Power supply: 12/24 Vdc

Power: 7 W

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

PWCG061



Battery charger

Reference: PWC

Dimensions: 170 x 65 x 36 mm

Power supply: 12/24 Vdc

Power: 7 W

Plug-in battery

Reference: PWB

Dimensions: 57 x 56 x 16 mm

Voltage: 3,7 V Capacity: 1900 mAh



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



Removable 2-point shoulder strap Reference: UWE102

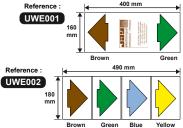


Cigarette lighter plug adapter for battery charger

Reference: PWA4

Dimensions: 90 x 20 x 20 mm Power supply: 12-24 Vdc Output: Power supply

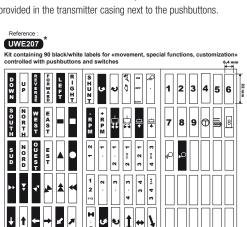


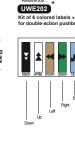


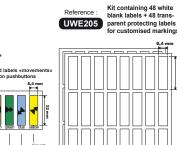


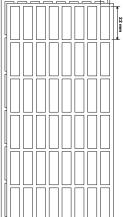
Sheet of adhesive labels for transmitters

The function buttons are identified by adhesive labels in the recesses provided in the transmitter casing next to the pushbuttons.











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