

Order Codes	Description
<b>WDS PTG 433</b>	Sensor for PIPES GUTTER protection with Tx Radio 433 MHz
<b>WDS PTG</b>	Sensor for PIPES GUTTER protection with Universal OUTPUTs

accessories :

<b>Wi Rx 8 433</b>	RADIO Receiver 433 MHz with <b>8 zone Outputs</b> O.C. and 3 Relays
<b>RIP 433</b>	Radio repeater 433 MHz to extend the range of further 100 Metres
<b>WSA BATCN</b>	LITHIUM Batteries not be RECHARGEABLE 3,6 Volt – 19 Ah

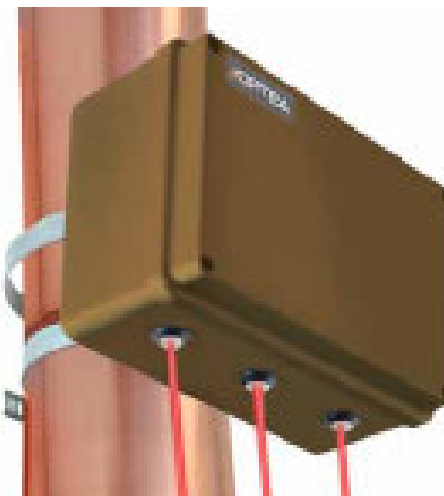


**Typical Application**



# USER MANUAL WDS PTG [433]

Optical sensor Self-Powered for pipes Gutter protection



**OPTEA s.r.l.**

Via Saragat , 14  
40062 Molinella (BO) - ITALY

Tel.: +39 051 665.00.71 Fax.: +39 051 665.00.28

Sito internet : [www.optea.it](http://www.optea.it) e-mail : [info@optea.it](mailto:info@optea.it)

## . WDS PTG [433] Description

The sensor WDS PTG implements a barrier to Active infrared beams that can detect an object or an approaching person . The weir is constituted by 1 transmitting channel that generates a infrared ray and 2 receiving channels that detect its reflection for CALCULATING DISTANCE and DIRECTION of an eventual obstacle. The sensitivity of the sensor is adjustable DIGITALLY into 10 steps, using a small button and 2 signaling LED on the board. Being the WDS PTG powered by lithium batteries, with the Radio module at 433 MHz or adding a contacts transmitter you have a completely wireless installation. In the version with the radio 433 on board , all signals are sent to the radio receiver (Wi Rx 8). In the case of external transmitter, the information of Battery Low can be available by feeding the external transmitter by the internal battery of the sensor . The external transmitter should be feed with the battery output with Jumper selectable onto 3 or 3.6 volts . The alarm recovery time is fixed at 10 seconds retriggerable. The TAMPER proof (NC) contact it is given in an impulsive way (2 seconds), while the Open Collector of the Alarm reflects the real state at all times. The NC output of the Tamper proof is made by a solid state relay because many contact transmitters do NOT have 2 inputs to manage separately Alarm and Tamper. With version 433, the radio sends ALL signals automatically, including the survival signal every 15 minutes.

## . Mounting WDS PTG [433]

- Procure 2 METAL BANDS of appropriate diameter to the pipe to be protected
- Pass the two METAL BANDS under the metal braket , on the back of the box
- Fix the Box of the WDS PTG at the desired height, tightening the METAL BANDS with the INFRARED LENSES side directed downwards.

## . Put into function the WDS SB [433]

- Remove the cover of the Box
- Plug the Radio Module WDS TX 433 or Connect the contacts transmitter (fig. 2) to the WDS SB
- Lock the batteries , in the battery holders and fix the eventual contact Transmitter
- Connect the two batteries (WSA BATCN) to connectors (Fig. 1)

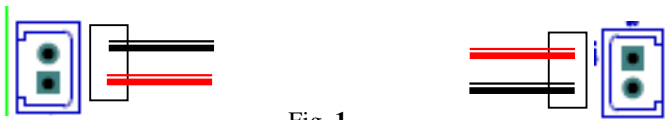
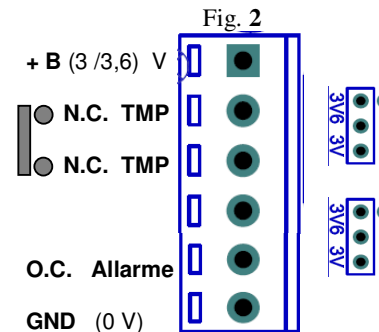


Fig. 1

- Leave CLEAR the action area of the sensor and wait for about 30 seconds
- then are performed two short BEEP and the Red LED blinking indicates the Sensitivity setting (3 blinks factory default)
- The sensitivity (\*) can be varied from 1 to 10, more blinks lower sens. you gets
- Close the lid of the box, carefully tightening the screws
- Check the OPERATION by approaching SLOWLY to the BOX

### (\*) : Setting the SENSITIVITY

- Press for a while the button in the center card
- The Red LED flashes and shows the set SENSITIVITY
- Holding the button down , the Red LED turns on
- StartS to Blink the GREEN LED
- For each Blink decreases the SENSITIVITY '
- Leave the button at the sensitivity desired
- At this point the LED Green REPEATS the FLASHES
- The Sensor is ready to OPERATE



### . Technical features WDS PTG [433]

Optical range of operation : [0.3 to 1] Meters

Time trigger /recovery : 0.5 / 5 Seconds

Batteries life > 5 Years

Outputs (SB 433) : Alarm, Tamper proof, Low Battery and Life

Outputs (SB) : Alarm and Tamper proof - Open Collector  
: Tamper only - N.C. Contact (solid-state)  
: 3 or 3.6 V battery ( jumper selectable)

Immunity to sunlight:  $\geq 50,000$  Lux @  $\pm 5^\circ$

Operating Temperature: (-25 / + 55) °C Ambient

Box sizes : [15 x 11 x 7] cm.

IP grade : IP 56