



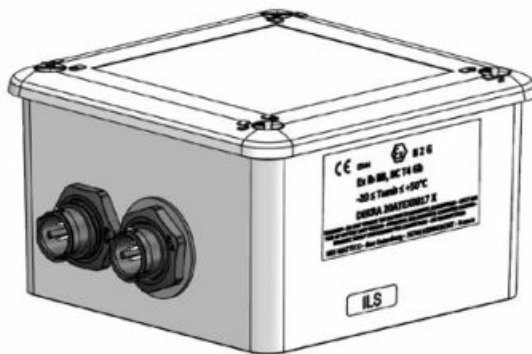
WATTECO 50-70-150 Pulse Counting and Analog Measurements in AtEx 1 Sensitive Area User Guide

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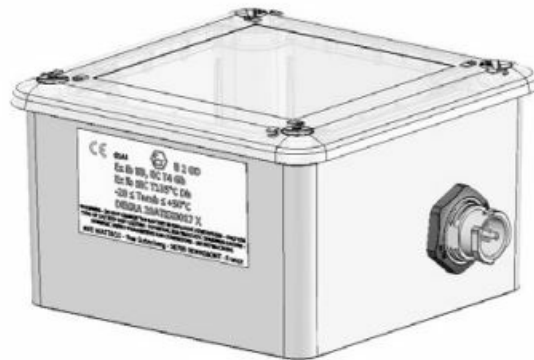


Quick Start GUIDE



Toran'O Atex zone 1

50-70-124
50-70-150
50-70-229



Pulse sens'O Atex zone 1

50-70-123
50-70-152
50-70-228

33-70-046-005

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1 Recommendations for use

The use of accessories:

Installation, maintenance and use must only be carried out by personnel who are competent in the use of electrical equipment in explosive atmospheres as defined in EN 60079-14.

Any repair or modification is strictly prohibited without the written permission of Watteco.

Risk of electrostatic discharge: The user must implement any action to control the risks of electrostatic discharge, especially by cleaning the product only with a damp cloth.


USE ONLY SAFT TYPE LS17500 BATTERIES.
Only the use of accessories in accordance with the intrinsic safety parameters is permitted (see on pages 3-4)

FOR PRODUCTS WITH EXTERNAL ANTENNAS: USE ONLY PASSIVE 868MHZ ANTENNAS WITH 50 OHM IMPEDANCE, MAXIMUM PEAK GAIN OF +4DBI, NO EXPOSED BARE WIRE, MOULDED OR PACKAGED IN A POLYMER CASE.

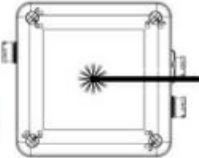
2 Start

! Provision the device on your LoRaWAN® network with the keys available on the secure platform.

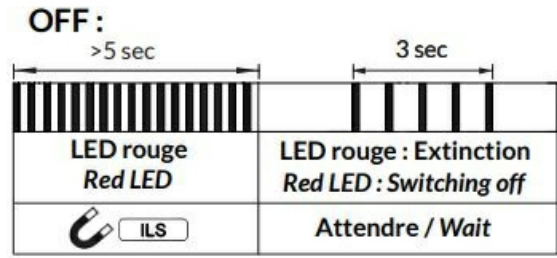
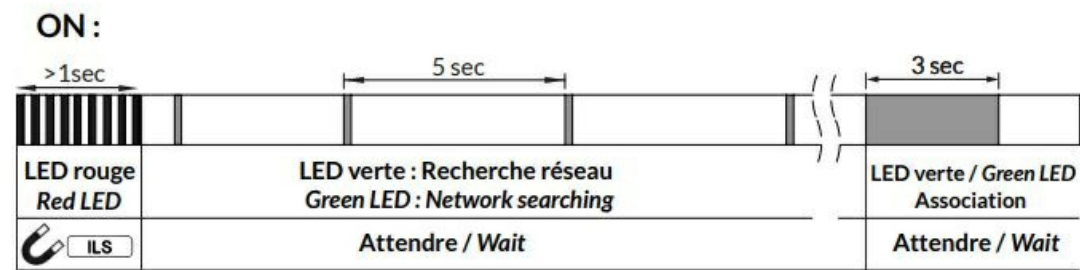
Vue de côté
Side view



Vue face
Front view



LEDs



Vidéo / Video :
ON - OFF



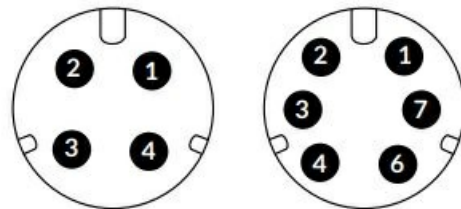
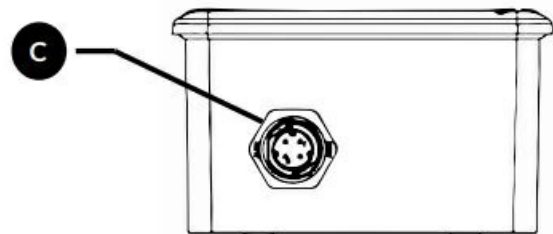
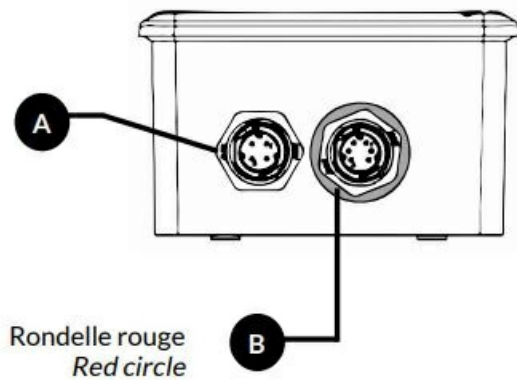
<https://www.watteco.fr/assistance/tutoriels-video/>

<https://www.watteco.fr/assistance/tutoriels-video/>

3 Connectors

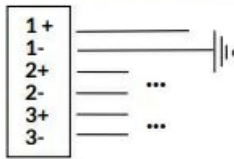
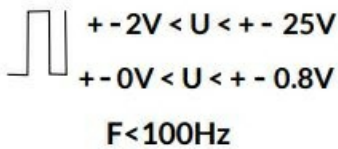
	Connecteur A : 4 points Connector A: 4 points		Connecteur B : Rondelle rouge : 6 points Connector B: Red circle: 6 points		Connecteur C : 6 points Connector C: 6 points	
	Connecteur Connector	Paramètres SI IS parameters	Connecteur Connector	Paramètres SI IS parameters	Connecteur Connector	Paramètres SI IS parameters
	4-20 mA		0-5V		50	
Toran'O Atex Zone 1 [50-70-124] IP55 [50-70-150] IP68 [50-70-229] IP55, Antenne externe / External antenna	P1: OUT - V+ [~14Vdc@20mA] P2: GND P3: IN-Measure P4: NC	Uo = 18,9V Io = 91mA Po = 430 mW Co = 1,6µF [IIB] Co = 262nF [IIC] Lo = 17mH [IIB] Lo = 4mH [IIC]	P1: OUT - V+ [~5,5Vdc@5mA] P2: GND P3: IN-Measure 1 P4: GND P6: IN-Measure 2 P7: GND	Uo = 6,51V Io = 67mA Po = 108 mW Co = 500µF [IIB], Co = 22µF [IIC] Lo = 33mH [IIB], Lo = 8mH [IIC]	P1: INPUT 1 P2: GND P3: INPUT 2 P4: GND P6: INPUT 3 P7: GND	Uo = 6,33V Io = 33µA Po = 23µW Co = 650µF [IIB], Co = 28µF [IIC] Lo = 1H [IIB], Lo = 1H [IIC] Ui = 25V Ii = 450mA Ci = 3,3nF Li ~ 0
Pulse Sens'O Atex zone 1 [50-70-123] IP55 [50-70-152] IP68 [50-70-228] IP55, Antenne externe / external antenna					P1: INPUT 1 P2: GND P3: INPUT 2 P4: GND P6: INPUT 3 P7: GND	Uo = 6,33V Io = 33µA Po = 23µW Co = 650µF [IIB], Co = 28µF [IIC] Lo = 1H [IIB], Lo = 1H [IIC] Ui = 25V Ii = 450mA Ci = 3,3nF Li ~ 0

A, B, C refers to the connectors in the table on the previous page

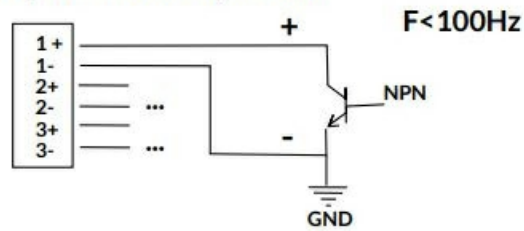


The connectivity of the subbases is defined by:

Output Signal:

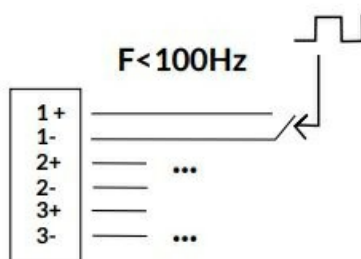


Open collector output NPN



Compatible with voltage of 3V and a current of 3μA.

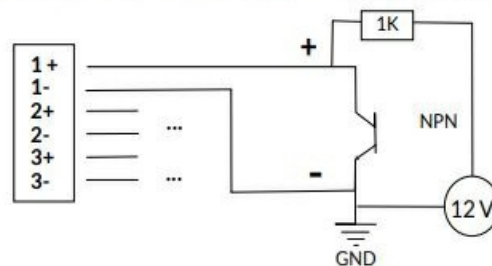
Contact sec : Dry contact:



NPN Open Collector:

Others, need to connect a compatible AtEx zone 1 external power supply with a resistor to limit the current.

Below exemple is given with an external 12V power supply.



4 Marking

The Toran'O / Pulse Sens'O sensors are certified according to the harmonised standards EN60079-0 ed. 6 and EN60079-11 ed.6 (EU Type Examination Certificate DEKRA 20ATEX0017 X)

■ Pulse sens'O

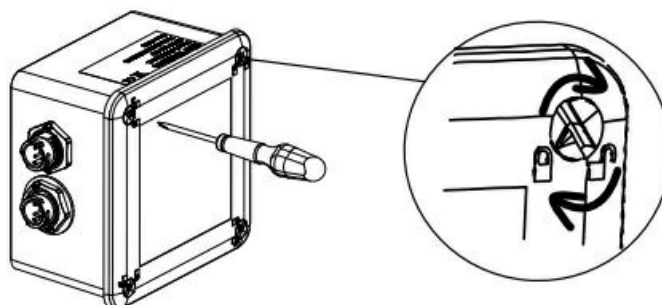
CE 2900 Ex ib IIC T4 Gb II 2 GD
 Ex ib IIC T135°C Db
 $-20 \leq T_{amb} \leq +50^{\circ}C$
 DEKRA 20ATEX0017 X

WARNING – DO NOT CHANGE THE BATTERY IN EXPLOSIVE ATMOSPHERE – ONLY USE TYPE OF BATTERY SAFT LS17500 – POTENTIAL ELECTROSTATIC CHARGING HAZARD – INTRINSIC SAFETY PARAMETERS FOR CONNECTORS – SEE INSTRUCTIONS WATTECO – 165 RUE MONTAGNE DU SALUT 56600 LANESTER – FRANCE

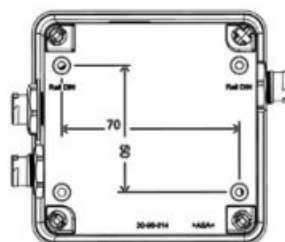
5 Setting up

Opening / Closure

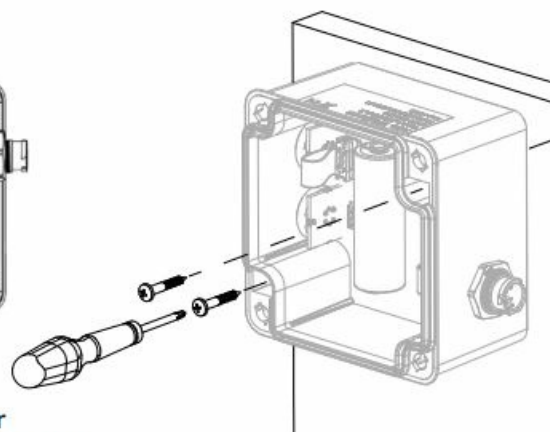
Unscrew the 4 screws by ¼ turn



Montage mural
Wall mounting



Placer les chevilles et visser le boîtier au mur
Place the dowels and screw the housing to the wall



6 Radio propagation



For the sensor communicates correctly, the number of obstacles should be limited to avoid excessive radio attenuation.

7 Characteristics

Référence / Reference	50-70-124	50-70-150	50-70-229	50-70-123	50-70-152	50-70-228
Classe / Class	A			A		
Niveau de puissance / Power Level	+14 dBm			+14 dBm		
Mesures / Measures :	Input S0 4-20mA / 0-5V			Input S0		
Antenne / Antenna	Interne Internal		Externe External	Interne Internal		Externe External
Matériaux du boîtier /Casing materials	ASA / PC			ASA / PC		
Indice de protection / IP rating	IP55	IP68	IP55	IP55	IP68	IP55



SITE SUPPORT

<https://support.watteco.com/>



CERTIFICATIONS

<https://www.watteco.fr/assistance/centre-de-telechargement/>

Watteco represented by JC LE BLEIS, declares that the radio equipment type 50-70-123 / 50-70-152 / 50-70-124 / 50-70-150 / 50-70-229 / 50-70-228 is in conformity with Directive 2014/53/EU (RED) and UKCA. The full text of the EU and UKCA Declaration of Conformity is available at the following web address:

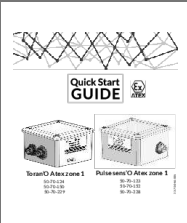
<https://www.watteco.com/assistance/download-center/>



IoT device manufacturer

Thanks for choosing WATTECO devices

Documents / Resources

	<p>WATTECO 50-70-150 Pulse Counting and Analog Measurements in AtEx 1 Sensitive Area [pdf] User Guide</p> <p>50-70-150 Pulse Counting and Analog Measurements in AtEx 1 Sensitive Area, 50-70-150, Pulse Counting and Analog Measurements in AtEx 1 Sensitive Area, Counting and Analog Measurements in AtEx 1 Sensitive Area, Analog Measurements in AtEx 1 Sensitive Area, Measurements in AtEx 1 Sensitive Area, AtEx 1 Sensitive Area, Sensitive Area, Area</p>
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References

- [W Concepteur et fabricant de capteurs transmetteurs radio connectés IoT - WATTECO](#)
- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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