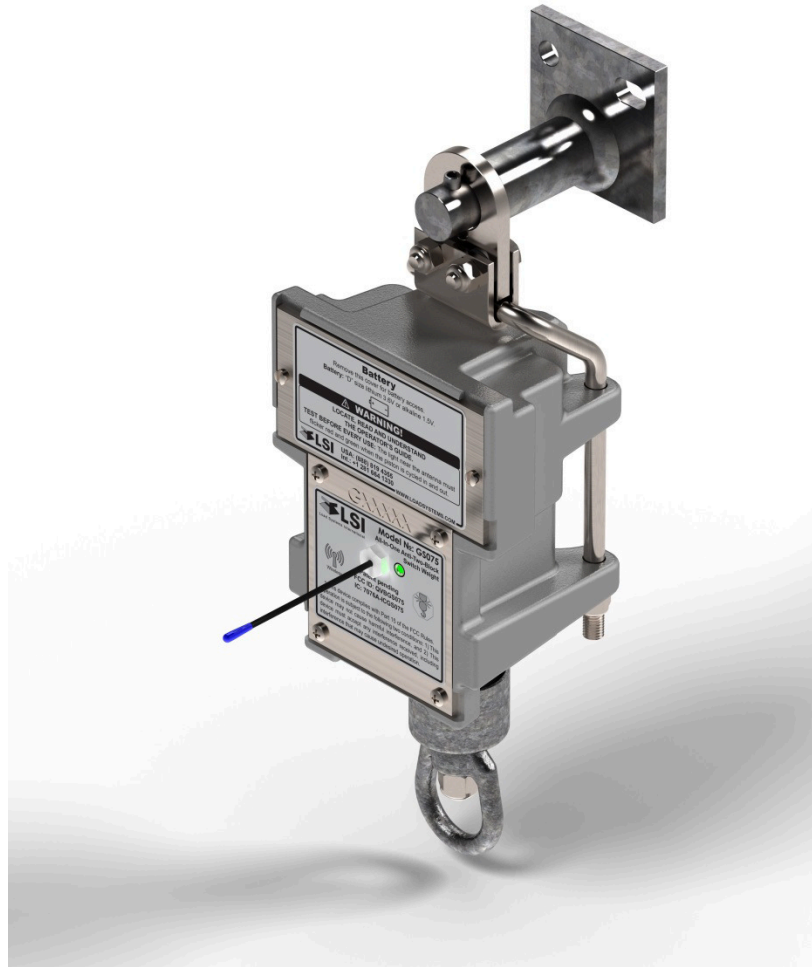


Ex Safety and Installation Instructions GS075 ATB Sensor



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SCOPE

This Ex instruction manual must be read and used by qualified personnel during system design and installation of the GS075 ATB Sensor. These instructions are provided as an addendum to the standard product manuals.



Warning

The GS075 is a Group IIC Ex ia certified intrinsically safe apparatus which may be installed in Hazardous Area Zone 0, Zone 1 or Zone 2.

The GS075 must be operated within environmental limitations.

The GS075 must only be installed by qualified personnel in accordance with the relevant international installation standards

The GS075 cannot be repaired by the end user thus any units exhibiting a failure must be returned to the manufacturer.

SAFETY ANALYSIS

In a system safety analysis, always check that the Hazardous Area / Hazardous location devices conform to the relevant standards.

INSTALLATION

The GS075 is fully self-contained and require no special grounding techniques. The GS075 has an IP rating of 65 with fully potted internal electronics and are intended to be mounted outdoors.

OPERATION

The GS075 is battery-powered stand-alone devices with no interconnecting cables.

Proper operation of the GS075 is indicated by a green LED flashing periodically. Failure of the LED flashing can indicate either a dead battery or no receiver is present within RF Range.

STARTUP

The GS075 contains a battery and will automatically power on and off when a remote receiver is detected, thus there are no power cables or power switches.

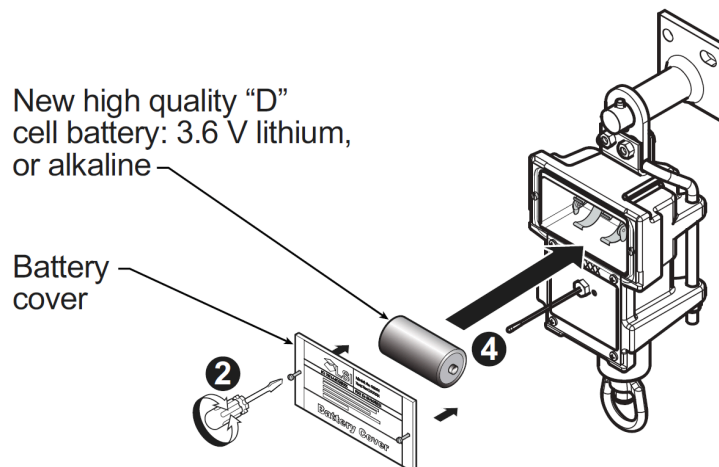
When a GS075 detects a remote receiver the green LED will flash on and off periodically. This indicates successful communication with the remote receiver.

If there is not a green LED flashing periodically it means either there is not a remote display turned on or the internal battery is dead.

BATTERY REPLACEMENT PROCEDURE

Only the battery specified here may be used as a replacement:

LSI ORDER CODE	MANUFACTURER	MANU PART NUMBER	DESCRIPTION
TB015	TADIRAN	TL5930	3.6V 19Ahr Lithium D-cell



- Step 1) Remove the two screws securing the battery cover to sensor body.
- Step 2) Remove the battery cover by gently prying with a flat bladed screwdriver.
- Step 3) Remove the battery by hand.
- Step 4) Remove the existing silicone from the sensor body and the battery cover.
- Step 5) Install the new battery. Insert the positive end and then push in the direction of the positive pole.
- Step 6) Apply a non-corrosive silicone RTV bead around the edge of the cover plate ensuring the bead is continuous with no bubbles or breaks.
- Step 7) Re-position the battery cover on the sensor body.
- Step 8) Insert the screws, **DO NOT OVERTIGHTEN.**

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STORAGE

The ambient temperature may exceed the lower operating temperature limit of -20°C without damage for limited periods of time such as may be experienced during air transport. The lower operating temperature limit is not to be exceeded during operation.

DISPOSAL

Please separate and dispose of electronic goods responsibly and follow guidelines and regulations for your region.

SPECIFICATIONS

Compliance	ATEX Certificate Number	Sira 14ATEX2332X
	Temperature Classification	T4, -20°C ≤ Tamb ≤ +75°C
Product Markings	ATEX	Ex ia IIC T4 -20°C ≤ Ta ≤ +75°C Sira 14ATEX2332X
		 II 1 G  0891
Quality Assurance Notification		TRAC12QAN0007
LED Indicators	Communicating	Green
Power Supply	Voltage	3.6 VDC nominal
	Current	30 milliamps
Physical	Dimensions	270mm x 120mm x 90mm (l x w x d)
	Weight	4.6 kg
	Material	ASTM A-536-80 gr 65-45-12, AISI 304, UNS C36000 Brass
	IP Rating	65
Environmental	Operating Temperature	-20°C to +75°C
	Humidity	0 to 99%
FCC ID	(GS075-B-ATEX-10 model only)	QVBGS000

SPECIAL CONDITIONS FOR SAFE USE



WARNING: The combined weight of the weight and chain assembly must **NOT** exceed **13.6 kg (30 lb)**.



WARNING: Following a two-block detection, the weight is lifted by the block and no longer supported by the chain. When exiting the two-block detection, the weight must be brought down at a controlled rate to limit the impact energy in the GS075 switch at the moment the chain fully extends. The downward speed of the block while the weight is descending must **NEVER** exceed **2.94 m/s (579 FPM)**. Once the weight is fully supported by the GS075 switch, the downwards speed limit does not apply.



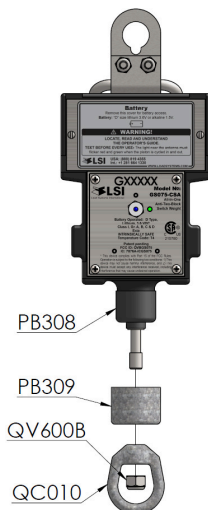
WARNING: An effective ignition hazard is created by a mechanical impact in the GS075 switch when the weight is left to freefall over a height greater than **0.44m (1.44 feet)**. When the weight is lifted more than **0.44m (1.44 feet)** over its resting height, the weight must always be brought down at a controlled rate.



WARNING: The crane cable must be free of defects that could cause the weight to snag on and lead to a freefall greater than the permitted maximum height.



WARNING: In order to operate safely and to eliminate the risk of internal corrosion, the PB308 seal must always be intact and free of any defect. An inspection must be performed on the seal at a maximum interval every **6 months** or when there is a doubt on the integrity of the seal. To perform the inspection, first remove the QV600B nut, the QC010 eye nut, and finally the PB309 seal guard. If the seal is found to be damaged, the GS075 must be removed from operation and must be returned to the manufacturer.



The GS075 Anti-Two-Block Switch must be operated within its environmental limitations.



Do not use the GS075 Anti-Two-Block Switch with gases which have a lower ignition temperature than specified



The GS075 Anti-Two-Block Switch must only be installed by qualified personnel in accordance to the relevant international installation standards






The GS075 Anti-Two-Block Switch cannot be repaired by the end user, thus any units exhibiting a failure must be returned to the manufacturer.



Only the battery cover can be removed. Opening the GS075 switch at the transmitter cover will invalidate certification.

INSTALLATION CONTROL DRAWING

Hazardous Area	Hazardous Area	Safe Area
<p>Ex ia IIC T4 -20°C < Tamb < +75°C</p> <p>Sira 14ATEX2332X</p> <div style="text-align: center;">  <p>GS075 ATB Sensor</p> </div>	<p>Ex d IIB T4 -30°C < Tamb < 60°C</p> <p>TRAC12ATEX0040X</p> <div style="text-align: center;">  <p>GS820-10</p> </div>	<p>n/a</p> <div style="text-align: center;">  </div>
<p>Notes:</p> <ol style="list-style-type: none"> 1) Operating temperature range -20°C < Tamb < +75°C 2) Installation and maintenance must only be done by competent personnel 3) Battery replacement shall only be accomplished if no explosive gas may be present 4) Installation shall be in accordance with 60079.14 and other local regulations as may be required I 5) Dissimilar metal contact should be avoided. 	<p>Notes:</p> <ol style="list-style-type: none"> 1) Operating temperature range -30°C < Tamb < +60°C 2) See Installation Instruction GM820-10&11_rev1_20120902 3) Installation and maintenance must only be done by competent personnel 4) GS820-xx must be returned to factory for service 5) Installation shall be in accordance with 60079.14 and other local regulations as may be required I 6) Dissimilar metal contact should be avoided. 	<p>Notes:</p> <ol style="list-style-type: none"> 1) Operating temperature range -30°C < Tamb < +60°C 2) Installation and maintenance must only be done by competent personnel 3) Installation shall be in accordance local regulations as may be required 4) Dissimilar metal contact should be avoided.

EU Declaration of Conformity



Manufacturer's Name: Trimble Navigation, Ltd.

Manufacturer's Address: 2666 boul. du Parc Technologique, Suite 190
 Québec, QC, Canada, G1P 2J7

Object of the declaration :

MODEL No.	DESCRIPTION	MODEL VARIATIONS
GS075-B-xx-ATEX-yy	ATB Sensor	xx (nil) = Standard Software version 01, 02, etc. = Alternate Software yy 10 = 903-927 MHz Transceiver 11 = 868-869 MHz Transceiver

Product Marking:

 **II 1 G Ex ia IIC T4 Ga Tamb: -20°C to +75°C**  **0891**

We, the manufacturer, declare under our sole responsibility that the products to which this declaration refers are in conformity with the essential requirements and other relevant requirements of the following European Directives:

2014/34/EU	ATEX Directive
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In accordance with the conformity assessment procedures described in Annex III and VII of the ATEX Directive, the listed products are covered by:

Sira 14ATEX2332X	EC Type Examination Certificate delivered by Sira Certification Service (NB 0518)
TRAC12QAN0007	Product Quality Assurance Notification delivered by Trac Global (NB 0891)

The following harmonized standards were applied:

EN 60079-0:2012/A11:2013	Explosive atmospheres. Equipment - General requirements
EN 60079-11:2012	Explosive atmospheres. Equipment protection by intrinsic safety 'i'
EN 60079-26:2007	Explosive atmospheres. Equipment with Equipment Protection Level (EPL) Ga

Québec, April 20th, 2016

 Marc Chouinard, Eng.
 Ex Responsible

Document Revision History

Revision History

Rev	Description	Author
1	Draft Release. Created from scheduled drawing UM010	M. Chouinard
2	Special conditions for safe use added	F.Grou
3	Update to the declaration of conformity	M. Chouinard

This manual is in accordance with the scheduled drawing "UM010" revision 0.6.
Any changes to this document must be approved by the Ex Responsible.