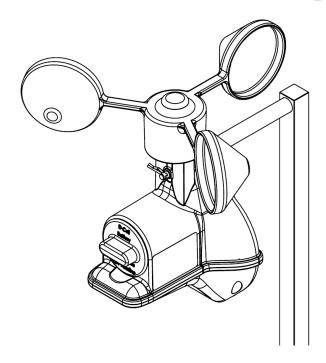


WIRELESS TECHNOLOGY & CRANE INSTRUMENTATION

DIVISIONS

# GS025 Radio Anemometer Installer and user guide



**WARNING**! Carefully read and understand this manual and the GS320/GS550/GS820 Installer and User's manual before proceeding.

	— <b>≥</b> ISI—
	Load Systems International
IMPORTANT! Refer to the "GS320/GS550/GS820 Display & G	iS Series
Sensors - Installer and User's Manual" for complete informat	
installation, operation, maintenance, certification and wa	rranty.



# **BEFORE PROCEEDING**

# Read and understand the following:

For your safety and that of the people that come into contact with *LSI* products, understand the significance of the instructions included in this guide, respect all laws and regulations and comply with applicable standards.

Pay particular attention to text boxes and the following words:

## **WARNING!**

**Warning**: this denotes an instruction that if not complied with may lead to serious injury or death.

#### **IMPORTANT!**

*Important*: this denotes an instruction that if not complied with may lead to product performance issues.

#### **WARNING!**

Installation must be made in compliance with *LSI* instructions and using *LSI* supplied components only. Failure to install all parts, or replacing parts or components with parts or components not supplied by *LSI*, may lead to system failure, serious injury or death.

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#### 1. Overview

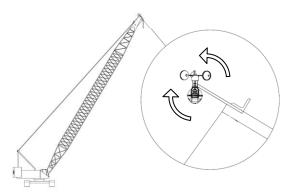
The GS025 is a magnetically encoded radio anemometer. The wind speed values are computed from pulses of magnets inserted in the rotor. This means that this anemometer has no adjustment and thus never needs to be calibrated.

Its battery powered electronics gives it an extended autonomy and the radio connection allows it to be installed in remote locations with difficult access.

Both the battery and rotor can be field serviced without the need for tools.

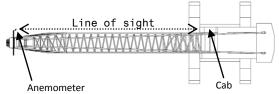
#### 2. Location

The anemometer location should be on the same side of the boom as the cabin mounted display, perpendicular to the boom, and at the highest point possible.



The wind speed sensor must pivot freely on the mounting mast at all boom angles.

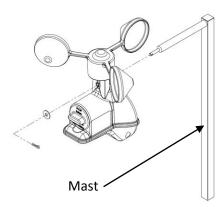
The wind cups must be fully exposed to the wind and spin freely at all boom angles.



There should be a clear and unobstructed line of sight between the anemometer

sensor and the cabin mounted display unit.

#### 3. Installation

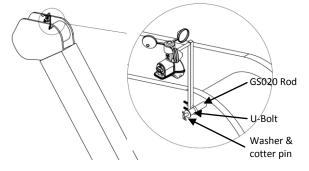


Weld or screw the mast to the boom at the selected position.

Note: An iron angle can be used to extend the reach of the mast to clear the boom tip.

# IMPORTANT! Do not weld in proximity to LSI sensor/transmitters.

The U-bolt can be used when retrofitting the GS025 on an already installed GS020 rod (previous generation anemometer). Make sure the U-bolt is fully tightened and add the washer and cotter pin at the rod tip.



Once the mast is secured in place the radio anemometer can be inserted on the pivot and secured in place by the washer and hairpin.



# 4. Operation

The radio anemometer is fully functional. It does not need to be calibrated or adjusted.

Refer to the GS320/GS550/GS820 manual for how to add this sensor to the sensor list to be displayed.

# 5. Security

The radio anemometer is equipped with a failsafe power system allowing it to communicate instantaneously an alarm via radio signals if the battery of the power circuit is rendered inoperative.

In the advent of a radio failure, the radio communication protocol will generate an alarm within 5 minutes of the loss of signal.

# 6. Battery replacement

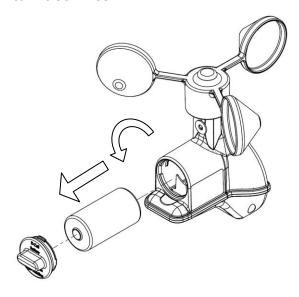
After a period of about 4 years, the battery may need to be replaced. To ensure the same performance as the supplied battery, replace with:

3.6V lithium D cell

If this type of battery is not available, this type can be used but with a reduced life:

1.5V Alkaline D cell

To replace a battery, turn the battery cover ¼ turn counter clock wise and remove, the battery can then be changed and reclose the battery cover by turning ¼ turn clock wise.



# 7. Replacement parts

PD058-A: rotor assembly



# 8. FCC and IC – Instructions to the User

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radiofrequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception.

#### **IMPORTANT!**

Changes or modifications to this equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC ID: QVBGS002 IC: 7076A-ICGS002

## **RF Exposure Warning:**

This product complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment. To comply with RF exposure requirements, the unit must be installed and operated with 20 cm (8 in.) or more between the product and your body. This product may not be collocated or operated in conjunction with any other antenna or transmitter.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This Class A digital apparatus complies with Canadian ICES-003.



# **LSI Contact Information**

#### Technical support:

LSI Technical Support is available 24 hours a day, 7 days a week from our *Houston* and *Dubai* locations. Please direct all technical support questions to either of these locations or contact us via email: techsupport@loadsystems.com

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