

Tomguard Temperature/Humidity









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Document history


VERSION	DATE	MODIFICATIONS
A	05/11/2013	Creation



User manual - Pictograms

	Note
	Equipment optimization tip
	Prohibited action notice
	Noteworthy point warning
	Danger or potential risk warning
	Reminder of the pre-requisites for implementation of the next instructions

Labguard™ is one of bioMérieux's registered trademarks.

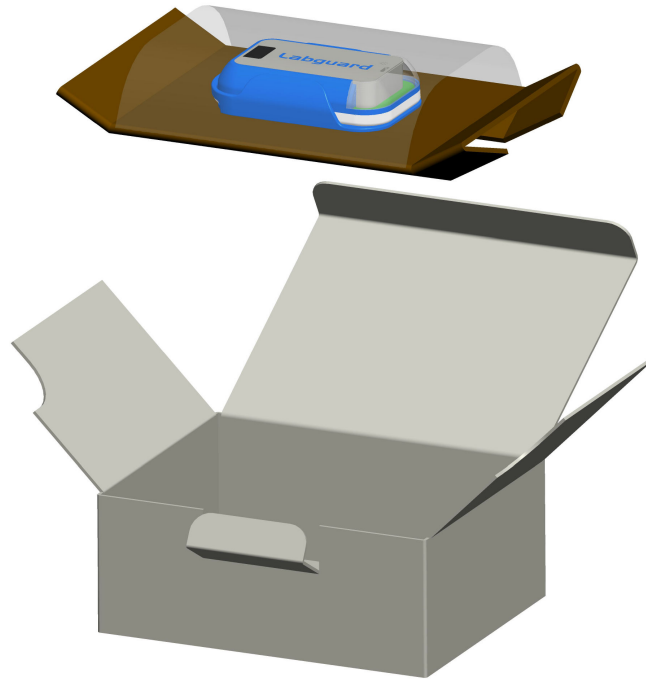
The information and graphs contained in this manual are not binding. bioMérieux therefore reserves the right to implement changes to the document without prior notice.

 bioMérieux will not approve any modifications whatsoever to the equipment implemented by the user. bioMérieux shall under no circumstance be held liable for any direct or consequential injury or damage whatsoever suffered by the user or by any third party, as a result of modifications to the equipment.

-  • This equipment is for professional use only.
-  • Users are required to read all the accompanying documents, including the statutory information, before using the equipment.

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Unpacking the device



Check that the device has not been damaged during transport. Then check that all the accessories listed below are present.

Transmitter

- Unit
- Unit support

Learning about the equipment

Labguard 3D™ equipment

With Labguard 3D™ equipment, you can:

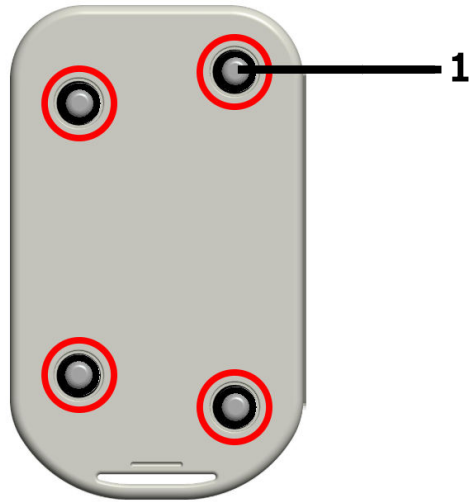
- Simultaneously measure the different physical parameters of the laboratory (temperature, humidity, CO2).
- Provide alerts with visual alarms in real time in case of anomalies.
- Save and transfer data and alarms to the Labguard® software.

Front



1	Multi-function button
2	Status indicator
3	Alarm indicator

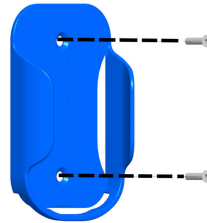
Rear



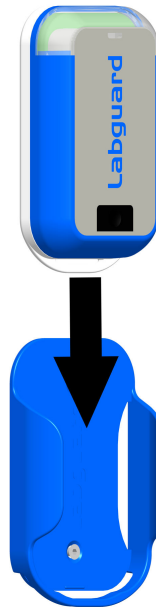
1	4 battery access screws.
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Installing the device

1. Fix the Tomguard support to the wall or to the unit to be monitored using the two screws or adhesive strips at the rear of the support.



2. Slide the device into the support.



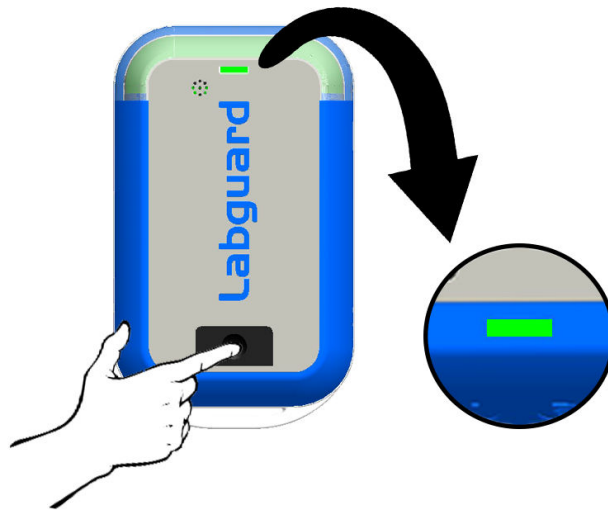
3. For greater security, you can add a padlock.



Switching the equipment on / off

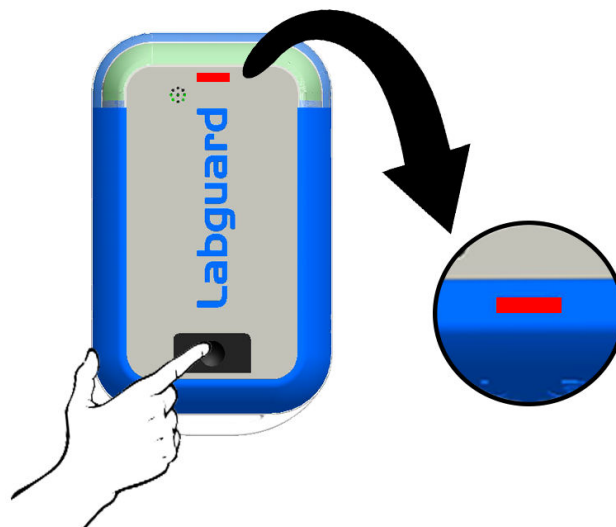
Turning the device on

To turn the device on, press and hold the multi-function button for 5 seconds.
The status light turns green.



Turning the device off

To turn the device off, press and hold the multi-function button for 5 seconds.
The status light turns red.




Understanding the indicator lights

Alarm indicators

The transmitter signals technical problems or measurement problems via alarms.

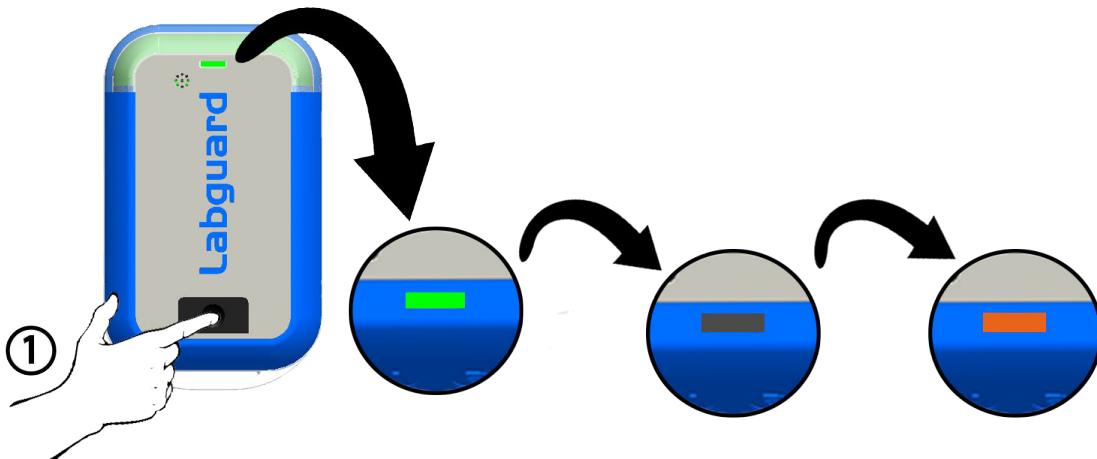
The alarm indicators specify the type of alarm:




Indicator lights	Color	Alarm origin	Type of alarm
	Red	Sensor	Time threshold exceeded.
	Orange	Sensor	Threshold exceeded.
	Purple	Sensor	Sensor absent.
	Blue	Transmitter	Communication absent.
	Yellow	Transmitter	Mains power supply absent.

Status indicator

Check the status of the battery and the power of the radio signal by pressing the multi-function button for one second:

- The status indicator lights up and indicates the battery status.
- The status indicator lights up again and indicates the power of the radio signal status.



Indicator lights	Status
	Good.
	Average.
	Poor.

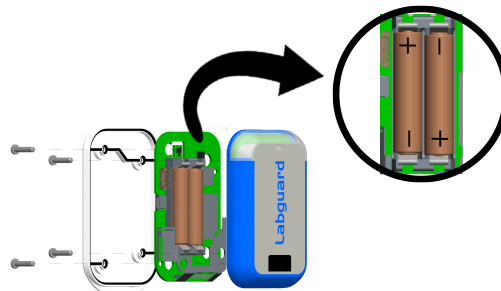
Technical characteristics


Environmental conditions	Altitude	up to 2,000 m	
	Temperature	from 0 to 40°C max.	
	Relative humidity (Rh)	from 10 to 80%	
	Product power supply	Battery: <ul style="list-style-type: none"> • 2 Li AAA batteries 1.5 V; 1,200 mAh, compliant with CEI 60086-4 standard 	
	Pollution level	2	
Atmospheric pressure		700 hPa to 1,100 hPa	
Installation category		Type II according to Directive CEI 664	
Device dimensions (W x H x D)		Device (mm): <ul style="list-style-type: none"> • 61 x 94 x 23 	Device in packaging (mm): <ul style="list-style-type: none"> • 167 x 133 x 74
Device weight		Device (g): <ul style="list-style-type: none"> • 110 	Device in packaging (g): <ul style="list-style-type: none"> • 170
Wireless		Emission bandwidth: <ul style="list-style-type: none"> • 865 to 868 Mhz, 60 channels • 868 to 868.8 Mhz, 12 channels • 902 to 912 Mhz, 20 channels • 433.05 to 434.79 Mhz, 8 channels 	Range: <ul style="list-style-type: none"> • 100 m inside • 400 m outside

Changing the batteries

Risk of explosion :

- Do not place the battery the wrong way round.
 - Do not short circuit.
 - Do not use damaged or leaking batteries.
 - Do not incinerate, recharge, dismantle, crush or expose to water.
1. Unscrew the lower part located at the rear of the device.
 2. Remove the batteries carefully and replace them making sure the positive (+) and negative (-) terminals are correctly positioned.
 3. Re-position the lower part then screw it back on.



 Only use recommended models to replace the battery.

Disposal



Recycle the lithium batteries in accordance with enforceable regulations.

Dispose of them by the appropriate means put in place.

Cleaning the device

Clean the equipment using a cloth dampened with ethanol or any other common disinfectant. However, avoid using formol, solvents, heat greater than 80°C (flames, autoclaving) or cleaning by dipping or spraying.

Options and accessories

Use the following options and accessories for optimum use of the device.

Reference	Designation
416053	Mains power supply μ USB_EU
416055	Mains power supply μ USB_UK
416054	Mains power supply μ USB_US
416056	Mains power supply μ USB_AU/CN
416068	Li batteries AAA 1.5V (2u)
416057	Sensor extension cable 1 m
416070	μ USB/USB cable 2 m

FCC compliance

This equipment has been declared in compliance with FCC regulations, section 15, applicable to class B digital equipments. These regulations are designed to provide adequate protection against harmful interferences in a residential installation. This equipment generates, uses and may emit radio-electric waves. It can generate interferences that may be harmful to radio-communications if it is not installed or used according to the instructions. Using this equipment in a specific installation may generate harmful interferences, in which case the user may need to correct the interference using one or all of the following methods:

- Redirect or move the receiver aerial
- Move the equipment away from the receiver
- Plug the equipment into a different socket from the one used for the receiver
- Contact the distributor or get help from a radio / TV technician.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- this device may not cause harmful interference.
- this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC's radiation exposure limits set forth for an uncontrolled environment under the following conditions:

- This equipment should be installed and operated such that a minimum separation distance of 20cm is maintained between the equipment and user's/nearby person's body at all times.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

NOTE: The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

Industry conformity Canada (IC)

This class B digital equipment complies with Canadian standard NMB- 03.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions :

- this device may not cause interference.
- this device must accept any interference, including interference that may cause undesired operation.

EC compliance


This class B numeric equipment complies with the relevant EC directives and standards listed in the accompanying certificate(s). Class B equipment is equipment suitable for use in domestic establishments and in establishments directly connected to a low voltage power supply network which supplies buildings used for domestic purposes. Class B equipment shall meet class B limits.

Compliance statement

Via this statement, we	bioMérieux SA 69280 MARCY L'ÉTOILE- FRANCE
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hereby declare that the product designated hereafter - as a result of its design and its type as well as the model that we have put into circulation - meets the fundamental health and safety requirements defined by the EC directive concerned.

This statement shall be rendered invalid by any modification not approved by us.

Machine designation:	Monitoring hardware
Model and reference type:	Humidity
Applicable EC directives:	<ul style="list-style-type: none"> • EC low voltage Directive (2006/95/EC) • EC-ECM directive (2004/108/EC) •
Harmonized standards applied in particular:	EN 61010-1 (Ed. 2010): 2010, EN 61326-1 (Ed. 2006): 2006, EN 301 489-3 (Ed. 2002 V1.4.1): 2002 V1.4.1 EN 300-220-2 V2.4.1 EN 62479: 2010
The technical documents were written by:	Mr Develon (Authorized person for documentation)
Date / Manufacturer's signature:	13 June 2013 
Signatory's position:	Instrument R & D Manager



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