iF100B

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Non-contact Digital Infrared Forehead Thermometer

User Manual Ver 1.0

Version 1.0

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To download the latest manual for the thermometer, simply scan the QR code below or visit https://innovo-medical.com/products/innovo-iF100B-thermometer

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Questions or Comments?
Call: 858-888-9781
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Introduction

Thank you for purchasing the Innovo iF100B Non-contact Digital Infrared Forehead Thermometer. The iF100B Forehead Thermometer has passed numerous rigorous clinical tests and has proven to be safe, reliable and accurate when used in accordance with the operation manual.

The iF100B Forehead Thermometer has been specifically designed to measure body temperature from the forehead. The non-contact method of measurement is safe, hygienic and suitable for use by people of all ages.

Before using the thermometer, please read this User Manual carefully and follow the instructions stated herein. Please check and inspect the package contents. If any component is damaged or missing, or if you have any concerns, please contact cs@innovogroups.com or call 858-888-9781 for assistance.

Keep this User Manual in a safe place for future reference.

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1.Standard Packing List

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2.Features of the iF100B Forehead Thermometer

The iF100B Forehead Thermometer measures body temperature without making contact with the body. It detects the natural infrared heat emitted from the skin surface of the forehead and displays the corresponding oral equivalent temperature reading obtained via clinical trials within 1 second.

Convenient and easy to use

- Easy mode of operation – take measurement with the press of a button
- Easily switch reading between Fahrenheit and Celsius
- Can be used anytime – even when your child is asleep
- Obtain reading faster than an oral thermometer and more comfortable than a rectal thermometer
- Ergonomic design
- Visual and audible alarm for fever detection

Accurate and quick

- Utilize the latest infrared technology – accurate, precise and instant readings
- Auto distance technology ensures correct measurement distance from the forehead
- Blue tracking light provides visual aid of the measurement site

Safe and hygienic

- Non-contact measurement method prevents cross-contamination
- Unlike traditional thermometers, there is no glass or mercury that could pose as a potential health hazard. The thermometer is made up of ABS plastic, an infrared sensor, an infrared temperature measuring

element, a microcomputer controlled circuit and an LED display.
- BPA and latex free

Memory recall
- Has a Memory Mode that automatically stores up to 30 readings
- Conveniently tracks changes in temperature by recalling stored data

Convenient fever warning
When the temperature registers 99.5°F/37.5°C and above, the thermometer will warn user of a possible fever with 10 short beeps and a color coded ring that glows red. (For normal body temperature, the signal is a long beep with a color coded ring that glows blue.)

Intended use
The iF100B Forehead Thermometer is a non-contact infrared thermometer intended to measure body temperature via the forehead. It may be used by medical professionals or by consumers in a home environment.

Operating principle
The infrared temperature sensor detects infrared energy emitted from the forehead. A built-in lens focuses the collected energy, which is then converted into a temperature reading by the thermopiles and measurement circuits.

3.Important Warnings and Safety Precautions

⚠ **Warning**
This product is not intended to substitute advice from a physician, pharmacist, or other licensed health-care professional. You should not use this product for self-diagnosis or for treating a health problem. Seek advice from your health-care provider immediately if you suspect that you or your child is not feeling well, has a

fever, appears distressed or has a medical condition.
Do not use the thermometer for purposes not specified in this User Manual. Follow the instructions stated herein and operate the thermometer carefully as directed.
Do not use the thermometer if any part, especially the sensor, shows any sign of damage. Please contact manufacturer if it is within the warranty period.
Do not attempt to repair, modify or disassemble the thermometer. This voids the warranty.
The thermometer is not designed for use on newborns. Please consult a doctor before using the thermometer on a newborn.
The thermometer is not a continuous monitoring device.
The thermometer is not a toy. Please keep out of children's reach. Some parts are small enough to be swallowed.
Do not use the thermometer in the vicinity of strong electromagnetic fields such as mobile telephones or radio installations. Keep a minimum distance of 3.3 meters from such devices when using the thermometer.
Please dispose the used thermometer and batteries in accordance with local regulation and requirement.

⚠ **Caution**
Do not use the thermometer in an ambient temperature higher than 40.0°C (104.0°F) or lower than 15.0°C (59.0°F). These are beyond the operating temperature range of the thermometer.
The thermometer is not waterproof. Do not immerse in water or other solutions. For cleaning and disinfecting, please follow instructions in the 'Care and Cleaning' section.
The thermometer is assembled precisely in order to perform properly. Do not drop the thermometer or touch the sensor with

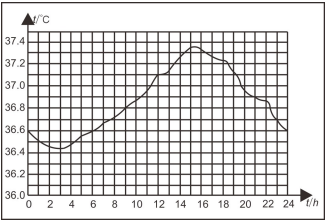
a hard object. The thermometer is not designed to withstand intense impact or vibration.
Please remove the batteries if the thermometer is not used for an extended period of time, e.g. more than 1 month.

4.Note on Body Temperature

- Normal body temperature is a range. It varies from person to person and can fluctuate throughout the day.

- Body temperature also varies by sites. Therefore, the iF100B Forehead Thermometer should not be used to obtain body temperature from other parts of the body.

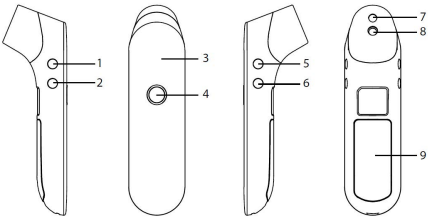
> Normal body temperature fluctuates throughout the day and is affected by external factors. The body temperature of an individual is the lowest between 2:00 a.m. and 4:00 a.m. and the highest between 2:00 p.m. and 8:00 p.m. An individual's body temperature typically changes by less than 1°C (1.8 °F) each day.



To determine if an individual is experiencing an elevated body temperature or has a fever, it is therefore critical to know, as a reference point, the individual's normal body temperature range when he/she is well.

5.Elements of the Thermometer

Measuring unit

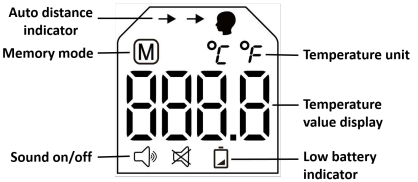


(1) Unit button (Celsius/Fahrenheit)
(2) Sound button (On/Off)
(3) LED display
(4) Power/Measure button (with color coded ring)
(5) Memory UP button
(6) Memory DOWN button
(7) Blue tracking light
(8) Sensor lens
(9) Battery cover

Button and its function

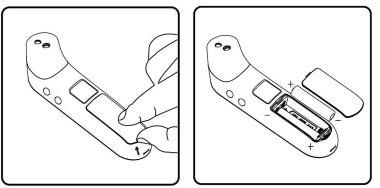
Button	Function
Power/Measure button	Press once to power on or to take measurement. Press for about 3-4 seconds to power off.
Unit button ℃/℉	To switch unit of measurement between Celsius and Fahrenheit.
Sound button	To turn sound on and off.
Memory UP button	To enter Memory mode.
Memory DOWN Button	To scroll down recorded data while in Memory mode.

Screen display and symbol designation



6.Battery Installation

1. Open the battery cover.
2. Install two AAA batteries into the battery compartment according to the stated polarities.
3. Close the battery cover until it snaps back in place.



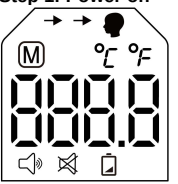
Note:

- Prior to using the thermometer for the first time, pull the plastic tab, if any, off the battery compartment.
- Batteries should be installed according to the stated polarities. Otherwise, the thermometer bracket may be damaged.
- Replace the batteries when the low battery icon ( ) flashes on the LED display. When battery is completely exhausted, the battery icon appears for 10 seconds, after which device switches off automatically.
- Please remove the batteries if the thermometer is not used for an extended period of time, e.g. more than 1 month.

⚠ Warning
Do not charge the included batteries because it may cause leakage, fire disaster or even explosion.
Do not throw batteries into fire because it can cause an explosion.
Dispose of batteries in accordance with local laws and regulations.

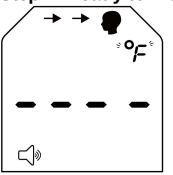
7.Measuring Forehead Temperature

Step 1: Power on



Press the **Power/Measure** button to turn the thermometer on.
Backlight comes on, color coded ring glows blue-to-red and the warm up sequence starts.

Step 2: Ready to measure



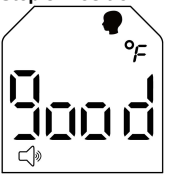
The selected unit (°F or °C) blinks. Press the **Unit** button (℃/℉) to switch between Celsius and Fahrenheit.

The auto distance indicator (→ →) directs user to position the thermometer closer to the forehead. Distance should be within 2" (5cm).

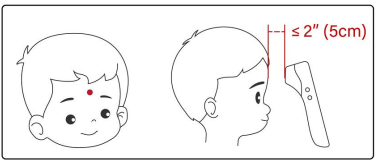
Note: You can press the **Sound** button (🔊) at any time to switch between sound on (🔊)

and sound off ( ).

Step 3: Position



Point thermometer perpendicular to and at the center of the forehead, just above the eyebrow. Bring thermometer closer towards the forehead until “good” registers on the screen and auto distance indicator ( ) disappears. This means distance is appropriate (within 2” or 5cm). You will hear a beep (if sound is on) and the blue tracking light will activate.

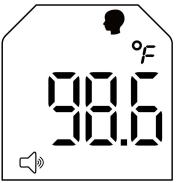
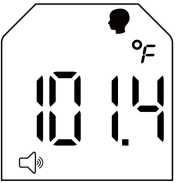
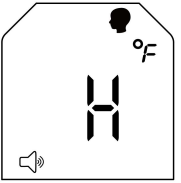
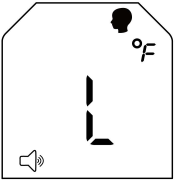


Note: If forehead area is covered with hair, sweat or dirt, please clean the area to improve reading accuracy.

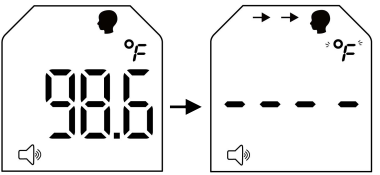
Note: Make sure the thermometer is pointing at the forehead at right angle. Otherwise, “good” may not register on the screen even if the thermometer is within appropriate distance. Adjust the angle and repeat Step 3 above.

Step 4: Taking temperature
Press the **Power/Measure** button once. Reading will be displayed in about 1 second.

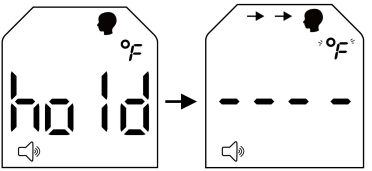
Note: You can press the **Unit** button (℃/℉) to switch the result between Celsius and Fahrenheit.

	**Normal temperatures** 93.2°F to 99.4°F / 34.0°C to 37.4°C Long beep Color coded ring glows blue for 3 seconds
	**Fever may be present*** 99.5°F to 109.4°F / 37.5°C to 43.0°C 10 short beeps Color coded ring glows red for 3 seconds
	**Out of measurement range** Higher than 109.4°F / 43.0°C 3 short beeps Color coded ring glows red for 1 second
	**Out of measurement range** Lower than 93.2°F / 34.0°C 3 short beeps Color coded ring glows red for 1 second
* **Note:** Temperature 99.5°F/37.5°C and above indicates that fever may be present. Please consult with your doctor if you are not sure.	

Step 5: Getting ready for next measurement



Previous reading will continue to show on the screen. To enter “Ready to measure” mode, press the **Power/Measure** button once after color coded ring stops to glow blue or red (i.e. after 3 seconds from last reading). Screen will show “- - - -” with auto distance indicator (→ →) on and blinking unit (°F or °C). Repeat Step 3 and Step 4 to continue with measurement.



If **Power/Measure** button is pressed while color coded ring still glows blue or red (i.e. within 3 seconds from last reading), the screen will show “hold” as the thermometer is not ready for measurement. Please wait until screen returns to show previous reading. Press the **Power/Measure** button again. The screen now should show “- - - -” with auto distance indicator (→ →) on and blinking unit (°F or °C). Repeat Step 3 and Step 4 to continue with measurement.

Step 6: Power off

Press the **Power/Measure** button for about 3-4 seconds at any time to power off the device.

Device will also power off automatically in 30 seconds if no activity is detected.

8.Temperature Taking Tips for Accurate Measurement

1. Always start with a clean thermometer to maintain measurement accuracy and hygiene. Pay extra attention to the sensor lens as any obstruction, such as dust or grease on the lens will prevent an accurate measurement.

2. If the sensor lens is dirty, please clean before use (Refer to Care and Cleaning section). A clean sensor lens should be reflective and gleaming. If it looks dull and lackluster, then it is dirty and requires cleaning.

3. Make sure both user and thermometer have remained at a constant ambient temperature for at least 30 minutes. Recent exposure of the thermometer to hot or cold temperatures will affect the reading.

4. Please use the thermometer indoor or in an environment where there is no strong air draft, such as from a fan, air conditioning or heater.

5. Before measuring forehead temperature, remove anything that may interfere with infra-red detection such as hair, sweat, or makeup/oil.

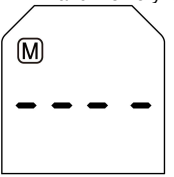
6. Do not move when taking temperature.

7. Do not hold the thermometer for a long time as it is highly sensitive to ambient temperature and heat.

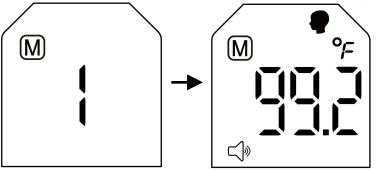
Note: As with any thermometer, proper technique is critical to obtain accurate measurements. Failure to follow instructions will result in inaccurate readings.

9.Memory Mode

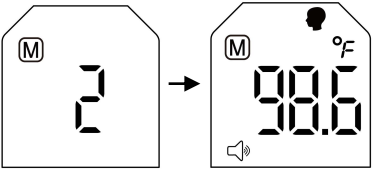
Accessing recorded data
When device is off, press the **Memory UP** button to enter Memory mode. Screen shows "- - - -" and Memory icon Ⓜ.



Press the **Memory UP** button again. Screen shows "1", then the newest recorded reading.



Press the **Memory UP** button again. Screen shows "2", then the next recorded reading.



Repeat the steps above to access more recorded data.

To scroll back to previous reading, press the **Memory DOWN** button.

Note:
- You can enter Memory mode from "Ready to measure" mode by pressing either the **Memory UP** button or **Memory DOWN** button.

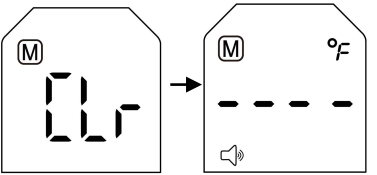
- A total of 30 readings can be recorded.
- When memory is full, the oldest data will be overwritten as new data is recorded.
- **“1”** corresponds to the newest data and **“30”** to the oldest data.

Exiting memory mode
To exit and power off, press the **Power/Measure** button for about 3-4 seconds.

To enter measurement mode from memory mode, press the **Power/Measure** button once.

If no button is pressed within 30 seconds, device will power off automatically.

Deleting recorded data
In Memory mode, press either the **Memory UP** button or **Memory DOWN** button for about 4-5 seconds until screen shows “Clr”. Press the **Memory UP** button or **Memory DOWN** button again to confirm the deletion. “Clr” flashes three times and data is deleted. Screen shows “- - - -”.

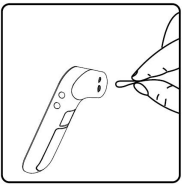


Note:
- To cancel data deletion after screen shows “Clr”, press the **Power/Measure** button once to return to Memory mode.
- After screen shows “Clr” and no button is pressed within 5 seconds, device will return to Memory mode. No data is deleted.

10.Care and Cleaning

- To clean the sensor lens, gently swab the surface with a cotton swab slightly

moistened with rubbing alcohol (70% Isopropyl). Do not exert too much pressure or use hard object to clean as it may damage the delicate sensor lens.

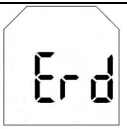
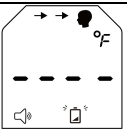


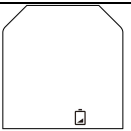
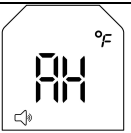
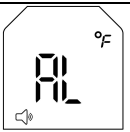
- Place the thermometer in a well ventilated area and wait for the alcohol to evaporate completely before using the thermometer. This may take about 5-10 minutes. Any residual alcohol will prevent accurate readings.

- To clean the thermometer, wipe with a soft cloth slightly moistened with water or rubbing alcohol. Allow to air dry in a well ventilated area or gently wipe dry with a piece of tissue.

⚠ **Caution**
The thermometer sensor is extremely sensitive. The sensor lens has to be absolutely clean and free of obstruction to ensure accurate readings.
Always check the sensor before use. The lens should be reflective and gleaming. If it looks dull and lackluster, please clean the lens before use.
Do not use abrasive, acidic or alkaline cleaners.
Do not immerse in water or cleaning solution.
Do not expose the thermometer to extreme temperatures, humidity, dust or direct sunlight.
Do not drop the thermometer and avoid strong vibrations.

11.Errors and Troubleshooting

Error Message	Possible cause and solution
 **Auto distance sensor blocked**	**Possible cause:** The auto distance sensor is blocked. **Solution:** Do not touch the thermometer probe, especially the bottom area where the auto distance sensor is embedded.
 **Distance error** 3 short beeps Color coded ring glows red for 1 second	**Possible cause:** The **Power/Measure** button is pressed when distance between the thermometer and forehead is not within 2” or 5cm (when “Good” is not displayed on screen). **Solution:** Position thermometer within 2” or 5cm from the forehead. When distance is appropriate, “Good” registers on the screen. You will also hear a beep (if sound is on) and the blue tracking light will activate. Press the **Power/Measure** button to take a reading.
 **Low battery** Low battery icon flashes on the screen	**Possible cause:** Battery life is less than 20%. However, the device can still work until battery is completely exhausted. **Solution:** Replace the batteries. Refer to Section 6 on ‘Battery Installation’.

 **Dead battery** Low battery icon is displayed on screen for 10 seconds, then device powers off automatically.	**Possible cause:** Battery is completely exhausted. **Solution:** Replace the batteries. Refer to Section 6 on 'Battery Installation'.
 **Out of operating temperature range** 3 short beeps Color coded ring glows red for 3 seconds, then device powers off automatically in 10 seconds.	**Possible cause:** Ambient temperature is too high (more than 104.0°F/ 40.0°C). **Solution:** Thermometer should be used in an environment where ambient temperature is between 59.0°F to 104.0°F /15.0°C to 40.0°C.
 **Out of operating temperature range** 3 short beeps	**Possible cause:** Ambient temperature is too low (less than 59.0°F/ 15.0°C). **Solution:** Thermometer should be used in an environment where ambient temperature is between 59.0°F to 104.0°F /15.0°C to 40.0°C.

Color coded ring glows red for 3 seconds, then device powers off automatically in 10 seconds.	

Troubleshooting

Problem	Possible Cause	Solution
The thermometer fails to power on.	The battery is exhausted.	Replace with new batteries of the same model or specifications.
	Polarities of the batteries are reversed.	Ensure that the batteries are correctly installed according to the polarity symbols in the battery compartment.
	The thermometer is faulty.	If the warranty period has not expired, contact the manufacturer.
The temperature reading is lower than typical body temperature range.	The sensor lens is dirty or there is an obstruction on the sensor lens.	Clean the sensor lens. Refer to Section 10 on 'Care and Cleaning'. A clean sensor lens should be reflective and gleaming.
	The thermometer is used within 30 minutes after being taken from a	Wait 30 minutes or more for thermometer to adjust to room

	cold environment.	temperature before taking measurement again.
The temperature reading is higher than typical body temperature range, in the absence of a fever.	The thermometer is used in an overly bright-lit environment.	Choose a moderately lit environment to use the thermometer.
	The thermometer is used within 30 minutes after being taken from a hot environment.	Wait 30 minutes or more for thermometer to adjust to room temperature before taking measurement again.
	The thermometer infrared sensor is faulty.	If the warranty period has not expired, contact the manufacturer.

Attention:

● Electromagnetic interference: iF100B Forehead Thermometer contains sensitive electronic components. You should not use the thermometer in an area with electromagnetic interference (e.g. near mobile phones or microwaves).

● Please dispose of the used thermometer and batteries in accordance with local regulation requirements.

● Please remove the batteries if the thermometer is not used for an extended period of time, e.g. more than 1 month.

12.Technical Specifications

Item	Specification
Product name and model	Innovo iF100B Non-contact Digital Infrared Forehead Thermometer
Applicable regulations and laws	ASTM E1965; IEC 60601-1; IEC 60601-1-2 (EMC); ISO80601-2-56; IEC 60601-1-11
Temperature units	°F/°C, adjustable
Measure-ment temperature range	93.2°F-109.4°F (34.0°C-43.0°C)
Measure-ment Accuracy (Laboratory)	±0.4°F within 95.0°F-107.6°F/ ±0.2°C within 35.0°C-42.0°C ±0.5°F within 93.2°F-94.8°F and 107.8°F-109.4°F/ ±0.3°C within 34.0°C-34.9°C and 42.1°C-43.0°C
Display resolution	0.1°F/0.1°C
Measure time	About 1 second
Latency time	About 3 seconds
Measuring distance	½” to 2” (1 to 5cm)
Display type	White LED
Automatic shutdown function	In 10 seconds when error message or flat battery icon appears. In 30 seconds when no button is pressed.
Memory storage	30 sets of measurement data

Low battery indicator	When voltage is below 2.6V+0.1V/-0.05V, low battery icon ( ) flashes. Device will still work. When voltage is below 2.5V+0.04V/-0.1V, low battery icon ( ) appears for 10 seconds, then device powers off automatically. Device will not work.
Operating voltage	2.6 ~ 3.3V
Battery	2x AAA size 1.5V
Battery life	At least 500 measurements after two years storage.
Dimension (LxWxH)	5.7" x 1.5" x 1.8" (145.5mm x 39.0mm x 45.0mm)
Weight	3.3oz (94g) with batteries
IP Class	IP22
Operating conditions	Temperature: 59°F~104°F (15°C~40°C) Humidity: 15%~95% RH, non-condensed Atmospheric pressure: 86kPa-106kPa
Storage and shipping conditions	Temperature: -4°F~+122°F (-20°C~+50°C) Humidity: 15%~95% RH, non-condensed Atmospheric pressure: 50kPa-106kPa Store in well ventilated area. Avoid severe shock, vibration and water during transportation

The infrared thermometer has been tested and conforms to the standard ASTM E1965-98. ASTM laboratory accuracy requirements in the display range of 98°F to102°F (37°C-39°C) for skin IR thermometers is ±0.5°F (±0.3°C). Note that for mercury-in-glass and electronic thermometers, the requirement per ASTM Standards E667-86 and E1112-86 is ±0.2°F (±0.1°C).

Attention:
● Type of protection against electric shock: Internally Powered Equipment
● Degree of protection against electric shock: Type BF applied part
● Degree of protection against ingress of water: IP22

13.Warranty and After-Sale Service

For inquiries, please email cs@innovogroups.com

The device is covered by a 1-year warranty, effective from the date of purchase. Please go to www.innovo-medical.com to register your purchase.

Batteries, packaging, and any damage caused by improper use are not covered under warranty.

14.Symbols

Symbol	Description
	The product is a Type BF device.
	Follow Instructions for Use. This document provides important product operation and safety information regarding this thermometer. Please read this document thoroughly before using the device and keep for future reference.
	Manufacturer information, including its name and address.
 Warning	A personal injury or device damage may result if the device is not used correctly.

Symbol	Description
 Caution	Inaccurate reading or device damage may result if the device is not used correctly.
IP22	Protected against solid foreign objects of 12.5mm diameter and greater. Protected against vertically falling water drops when the device is tilted up to 15°.
	Low battery symbol
	Device sound on/off
℃/℉	Measurement unit (Switch between Celsius and Fahrenheit)
	Memory mode

15. EMC Information - Guidance and Manufacturer's Declaration

● Electromagnetic compatibility: This device fulfills the stipulations of the standard IEC 60601-1-2 (EMC).
● Portable and mobile RF communications equipment can affect the device.
● **Note:** Do not use this device in the presence of electromagnetic or other interference outside the normal range specified in IEC60601-1-2.

Guidance and manufacturer's declaration – Electromagnetic emission		
The model iF100B is intended for use in the electromagnetic environment specified below. The customer or the user of the model iF100B should ensure that it is used in such an environment.		
Emissions test	Compliance	Electromagnetic envi-

		ronment - guidance
RF emissions CISPR 11	Group 1	The model iF100B uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interfer-ence in near-by electronic equipment.
RF emissions CISPR 11	Class B	The model iF100B is suitable for use in all establish-ments, in-cluding do-mestic esta-blishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	N/A	

Voltage fluctuations / flicker emissions IEC 61000-3-3	N/A	

Guidance and manufacturer's declaration – Electromagnetic immunity			
The model iF100B is intended for use in the electromagnetic environment specified below. The customer or the user of the model iF100B should assure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment-guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±8 kV contact ±15 kV air	±8 kV contact ±15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient /burst IEC 61000-4-4	±2 kV for power supply lines and patient coupled lines	N/A	Mains power quality should be that of a typical commercial or hospital

			environment.
Surge IEC 61000-4-5	±1 kV line(s) and neutral	N/A	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5 % U_T (>95% dip in U_T) for 0,5 cycle 40 % U_T (60% dip in U_T) for 5 cycles 70 % U_T (30 % dip in U_T) for 25 cycles <5 % U_T (>95 % dip in U_T) for 5s	N/A	Mains power quality should be that of a typical commercial or hospital environment. If dips or interruptions of main power occurs, the current of the model iF100B may drop off from normal level. It may be necessary to use uninterruptible power supply or

			a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels character-istic of a typical location in a typical commercial or hospital environment.
NOTE U_T is the a.c. mains voltage prior to application of the test level.			

Guidance and manufacturer's declaration – Electromagnetic immunity			
The model iF100B is intended for use in the electromagnetic environment specified below. The customer or the user of the model iF100B should ensure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment -guidance
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3 Vrms 150 kHz to 80 MHz 3 V/m 80 MHz	N/A 3 V/m	Portable and mobile RF communications equipment should be used no closer to any part of the model iF100B, including ca-

	to 2.5 GHz		bles, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = [\frac{3.5}{E_1}]\sqrt{P}$ $d = [\frac{3.5}{E_1}]\sqrt{P}$ 80 MHz to 800 MHz $d = [\frac{7}{E_1}]\sqrt{P}$ 800 MHz to 2.5 GHz where p is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m).[b] Field strengths from fixed RF transmitters, as determined by an Electromagnetic site survey,a should be less than the

			compliance level in each frequency range.[b] Interference may occur in the vicinity of equipment marked with the following symbol: 

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.
NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

a. Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the model iF100B is used exceeds the applicable RF compliance level above, the model iF100B should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the model iF100B.
b. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended separation distances between portable and mobile RF communications equipment and the model iF100B

The model iF100B is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the model iF100B can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the model iF100B as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m	
	80 MHz to 800 MHz $d = [\frac{3,5}{E_1}]\sqrt{P}$	800 MHz to 2,5 GHz $d = [\frac{7}{E_1}]\sqrt{P}$
0.01	0.12	0.23
0.1	0.38	0.73
1	1.2	2.3
10	3.8	7.3
100	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.
NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

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