Manufacturer's declaration-electromagnetic emissions

WAND Clinical series is intended for use in the electromagnetic environment (for home healthcare) specified below. The customer or the user of WAND Clinical should assure that it is used in such an environment.

Emissions Test	Compliance	Electromagnetic environment – guidance (for home healthcare environment)
RF emissions CISPR 11	Group 1	WAND Clinical series uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Group B	WAND Clinical series is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.

Manufacturer's declaration – electromagnetic immunity

WAND Clinical series is intended for use in the electromagnetic environment (for home healthcare) specified below. The customer or the user of WAND Clinical series should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance Level	Electromagnetic environment – guidance (for home healthcare environment)
Electrostatic discharge (ESD) IEC 61000-4-2	Contact:±8 kV Air±2 kV,±4 kV,±8 kV,±15 kV	Contact:±8 kV Air±2 kV,±4 kV,±8 kV,±15 Kv	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%
Power frequency (50, 60 Hz) magnetic field IEC 61000-4-8	30 A/m 50 Hz or 60 Hz	30 A/m 50 Hz and 60 Hz	WAND Clinical power frequency magnetic fields should be at levels characteristic of a typical location in a typical home healthcare environment.

Manufacturer's declaration – electromagnetic immunity

WAND Clinical is intended for use in the electromagnetic environment (for home healthcare) specified below. The customer or the user of WAND Clinical should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance Level	Electromagnetic environment – guidance (for home healthcare environment)
Radiated RF IEC 61000-4-3	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz	10 V/m 80 MHz – 2,7 GHz 80 % AM at 1 kHz	Recommended separation distance: $d = 1,2\ \sqrt{P}$ $d = 1,2\ \sqrt{P}$ 80MHz to 800 MHz $d = 2,3\ \sqrt{P}$ 800MHz to 2,7 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). 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:

NOTE1 At 80 MHz and 800 MHz, the higher frequency range applies.
NOTE2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

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 WAND Clinical is used exceeds the applicable RF compliance level above, WAND Clinical should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating WAND Clinical.

ThermoWorks
www.thermoworks.com
741 E. Utah Valley Dr.
American Fork, UT 84003

For service or warranty:
1-800-393-6434
1-801-756-7705
techsupport@thermoworks.com

P-24-009-02-a

Recommended separation distances between portable and mobile RF communications equipment and WAND Clinical

WAND Clinical is intended for use in an electromagnetic environment (for home healthcare) in which radiated RF disturbances are controlled. The customer or the user of WAND Clinical can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and WAND Clinical 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		
	150 kHz to 80 MHz $d = 1,2\sqrt{P}$	80 MHz to 800 MHz $d = 1,2\sqrt{P}$	800 MHz to 2,7 GHz $d = 2,3\sqrt{P}$
0,01	N/A	0,12	0,23
0,1	N/A	0,38	0,73
1	N/A	1,2	2,3
10	N/A	3,8	7,3
100	N/A	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.

Manufacturer's declaration-electromagnetic immunity
Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications equipment

WAND Clinical is intended for use in the electromagnetic environment (for home healthcare) specified below. The customer or the user of WAND Clinical should assure that it is used in such an environment.

Test frequency (MHz)	Band a) (MHz)	Service a)	Modulation b)	Maximum power (W)	Distance (m)	IMMUNITY TEST LEVEL (V/m)	Compliance LEVEL (V/m) (for home healthcare)
385	380–390	TETRA 400	Pulse modulation b) 18 Hz	1,8	0,3	27	27
450	430–470	GMRS 460, FRS 460	FM c) ±5 kHz deviation 1 kHz sine	2	0,3	28	28
710	704–787	LTE Band 13,17	Pulse modulation b) 217 Hz	0,2	0,3	9	9
745							
780							
810	800–960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5	Pulse modulation b) 18 Hz	2	0,3	28	28
870							
930							
1720	1700–1990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	Pulse modulation b) 18 Hz	2	0,3	28	28
1845							
1970							
2450	2400–2570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation b) 217 Hz	2	0,3	28	28
5240	5100–5800	WLAN 802.11 a/n	Pulse modulation b) 217 Hz	0,2	0,3	9	9
5500							
5785							

NOTE If necessary to achieve the IMMUNITY TEST LEVEL, the distance between the transmitting antenna and the ME EQUIPMENT or ME SYSTEM may be reduced to 1 m. The 1 m test distance is permitted by IEC 61000-4-3.

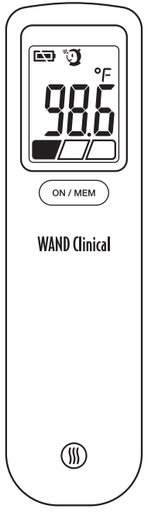
a) For some services, only the uplink frequencies are included.
b) The carrier shall be modulated using a 50% duty cycle square wave signal.
c) As an alternative to FM modulation, 50% pulse modulation at 18 Hz may be used because while it does not represent actual modulation, it would be worst case.

ThermoWorks

WAND Clinical™

Non-Contact, Forehead Thermometer

TX-5710



Operating Instructions

For tips on using infrared thermometers visit the ThermoWorks Help Center at help.thermoworks.com.

Indications for Use

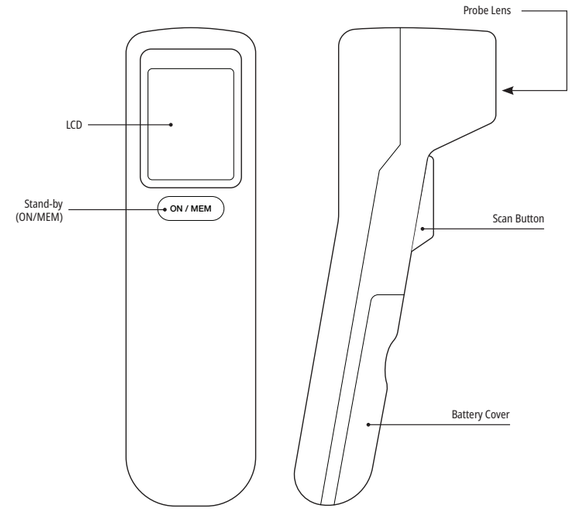
WAND Clinical is a non-contact digital forehead thermometer using an infrared detector (thermopile detector) to detect body temperature from forehead center in people of all ages.

Intended operator

The intended operator should have at least 8 years of education, including patients or other perators.

Clinical Benefits

The infrared forehead thermometer can be quick and safety to measure body temperature because it used a noninvasive method.



Specifications

Temperature Range	Forehead Mode: 82.4 to 109.4°F (28 to 43°C) / Surface Mode: –7.6 to 176°F (–22 to 80°C)
Operating Range	50 to 104°F (10 to 40°C) 15 to 85% RH
Storage Range	–4 to 122°F (–20 to 50°C), RH≤85%
Transport. Temp	Shall be less than 158°F (70°C), RH≤95%
Atmospheric Pressure	800 to 1013 hPa
Accuracy	Forehead Mode: ±0.4°F (0.2°C) within 95 to 107.6°F (35 to 42°C), otherwise ±0.5°F (0.3°C) Surface Mode: ±0.5°F (0.3°C) within 93.2 to 109.4°F (34 to 43°C), otherwise 4% or ±4°F (±2°C) whichever is greater.
Resolution	0.1°
Units	°F/°C
Battery	2 x AAA, 3,750 continuous readings
Dimensions	5.9 L x 2.5 W x 1.6 D inches (150.8 x 63.1 x 40 mm)
Weight	3.8 oz (108 g)
Expected Service Life	4 years
Contents	Thermometer x 1, Operating Instructions x 1, Battery AAA x 2

Complies with ASTM E1965-98, EN ISO 80601-2-56, IEC/EN60601-1-2(EMC), IEC/EN60601-1 (Safety) standards, ISO10993, RoHS

This thermometer is an adjusted mode thermometer that converts forehead temperature to display its 'oral equivalent'. (According to the result of the clinical evaluation to get the offset value).

This device is suitable for measuring the temperature without and contradictions.

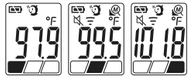
Functions

Forehead Temperature
The thermometer has been designed for personal use. It's not meant to replace a visit to the doctor. Please also remember to compare the measurement result to your regular body temperature. Please consult with doctor if you have health concerns.
• Please see the "Use of the thermometer" section to learn how to measure the body temperature.

Surface Temperature
The surface mode shows the actual and unadjusted surface temperature which is different from the body temperature. It can help for monitoring the object temperature such as baby's milk.
• Please see the "Use of the thermometer" section to learn how to measure the object temperature.

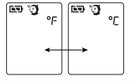
Temperature Awareness Signal
If the thermometer detects a temperature ≥99.5°F (37.5°C) under forehead mode, three short beep sounds will follow one long beep sound to warn the user for potential fever.

Zone Indicator
The Bar display at the bottom of the LCD screen indicates the measuring temperature. If thermometer detects a body temperature <99.5°F (37.5°C), the bar shows "Green" color; if temperature ≥99.5°F (37.5°C) and <100.4°F (38.0°C), the bar shows "Yellow" color; if temperature ≥100.4°F (38.0°C), the bar shows "Red" color.
⚠RED: Continually monitor the body temperature. If in doubt about the person's condition, must seek medical assistance.
YELLOW: Continually monitor the body temperature. If in doubt about the person's condition, suggest seeking medical assistance.
GREEN: Normal body temperature.



Memory
There are total 25 sets of measurement condition for body temperature.
• When power on, press the ON/MEM button to see the temperature records with Ⓜ icon.

°C / °F Switch
With instrument turned off, press and hold the Scan button, then press the ON/MEM button for 3 seconds, icon ""F" will be switched to icon ""C". It can also be used the same process to change the LCD display from °C to °F. Complete the process again to switch back to °F. Please note: stored readings will be deleted when switching between units.



Mute mode
The default setting is for sound on. To turn the sound off, press and hold the ON/MEM button for 3 seconds. The 🔇 icon will flash on the display and the instrument is muted. Complete the process again to turn the sound on and unmute the instrument.
• If keep pressing ON/MEN button for 5 seconds after 🔇 icon flashing, the device will be power off WITHOUT setting Mute.

Use of the Thermometer

1. Power on: Press the ON/MEM button
2. Measuring body temperature on the forehead: Press the ON/MEM button to power on the device. ***Forehead mode is the default mode***. You can see the icon on the screen and hear two beep sounds. In this mode, you can hold the thermometer within 3.15-inches (8 cm) from the central forehead and press the SCAN button to get the forehead measurement. After each forehead measurement, you will hear two beeps and the instrument is ready for the next measurement. Readings should take approximately 1 second.

Notes:
- Remember to keep the forehead area clean and away from sweat, cosmetics and scars while taking measurements.
- Please remain in a stable environment for 5 minutes and avoid exercising, bathing, or showering for 30 minutes, which can artificially raise your temperature.
- During the measurement, please avoid direct sunshine and wind.
- The "Clinical Bias" is 1.22°F (0.68°C).
- The "Limits of Agreement" is 1.27.
- The "Repeatability" is 0.12°F (0.06°C).

3. Measuring surface temperature: After power on, press and hold the ON/MEM button, and press the SCAN button one time for "Infrared thermometer" mode to see icon on your LCD display. In this mode, it can get the target surface temperature. When you press the SCAN button, it will get the real time temperature immediately. If you press and hold the SCAN button, the reading of measurement will be continuously updated. Applications include temperature measurements for water, milk, cloth, or other objects.

Notes:
This mode shows the actual and unadjusted surface temperature which is different from the body temperature.
(This product is certified as a medical device in the European Union under the Medical Device Regulation 2017/745 by SGS CE1639, exclusively for the indication(s) of non-contact forehead temperature measurement. Other non-medical uses ascribed to this device are not within the scope of CE certification, and users should be aware product performance and/or safety has not been evaluated by SGS for those purposes.)

4. Power off:
- Device will automatically shut off if left idle for more than 1 minute to extend battery life.
- Manually power off the device by pressing the ON/MEM button.

Cautions

⚠ Choking from swallowing small parts and batteries by children or pets is possible, keep small parts and batteries out of reach of children.
⚠ If the device will not be used for an extended period of time, power off the unit, remove batteries and store in a cool dry place.
⚠ No modification of this equipment is allowed.
⚠ This device should not be submerged into any liquids or exposed to direct moisture. Keep away from direct sunlight.
⚠ If there is temperature difference between the location where the device is stored and where measurement will take place, subject and device should remain in the same location for at least 15 minutes before measurement.
⚠ Always be sure the probe lens is clean without any damage.

Battery Replacement

When the "Low Battery" icon indicates the battery is low, the battery should be replaced immediately with 2x AAA batteries.
1. Open the battery cover: Use the thumbs to press down and slide the battery cover off.
2. Insert the new 2x AAA according to the correct polarity.
3. Replace the battery cover.

- Do NOT dispose of batteries in household trash or incinerate them.
- Even used batteries may cause severe injury or death.
- Call a local poison control center for treatment information.
- Non-rechargeable batteries are not to be recharged.
- Do not force discharge, recharge, disassemble, heat above 140°F (60°C) or incinerate. Doing so may result in injury due to venting, leakage, or explosion resulting in chemical burns.
- Remove and immediately recycle or dispose of batteries from equipment not used for an extended period according to local regulations.
- Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children.

Storage and Cleaning

The instrument should be stored at room temperature, away from liquids and direct sunlight. If there are any temperature differences between the place where the instrument is stored and where you are going to measure, please allow the instrument to stabilize to the ambient temperature for at least 15 minutes. Holding the instrument too long may cause a higher ambient temperature reading. This could make the body temperature measurement lower than usual.

The sensor lens is the most delicate part of the instrument and should be kept clean at all times. Care should be taken when cleaning the lens to avoid damage. Use only a soft cloth or cotton swab with medical alcohol (70-75% alcohol), allowing the lens to dry fully (for at least one minute) before using the instrument again. After cleaning, visually verify that the lens is clean. If not, repeat previous step and continue cleaning. Failure to thoroughly clean may result in inaccurate measurements.

Warranty

This instrument carries a one-year warranty against defects in either components or workmanship. During this period, products that prove to be defective will, at the discretion of ThermoWorks, be either repaired or replaced without charge. Full details of liability are available within ThermoWorks Terms & Conditions of Sale at www.thermoworks.com/product-warranty.

For warranty, service, and technical assistance, please contact ThermoWorks' Technical Support at (385) 330-0591 or email at techsupport@thermoworks.com

Troubleshooting

Er	Other errors, the system is not functioning properly. Unload the battery, wait for 1 minute and repower it. If the message reappears, contact the retailer for service.
Er 1	Measurement before device stabilization. Wait for "Er1" to disappear.
Er 3	The ambient temperature is not within the range between 50°F and 104°F (10°C and 40°C). Allow the thermometer to rest in a room for at least 15 minutes at room temperature: 50°F and 104°F (10°C and 40°C).
Hi	In forehead mode: Temperature taken is higher than 109.4°F (43°C). In surface mode: Temperature taken is higher than 176°F (80°C). Please select the target within specifications. If a malfunction still exists, please contact the nearest retailer.
Lo	In forehead mode: Temperature taken is lower than 82.4°F (28°C). In surface mode: Temperature taken is lower than –7.6°F (–22°C). Please select the target within specifications. If a malfunction still exists, please contact the nearest retailer.
188.8	Device cannot be powered on to the ready stage. Change with a new battery.

Symbol Descriptions

	Please do not dispose of the product in the household waste at the end of its useful life. Disposal can take place at appropriate collection points provided in your country.		To protect the environment, dispose of empty batteries at your retail store or at appropriate collection sites according to national or local regulations.
⚠	Caution		BF type applied part
♻	Paper Recycling		Follow instructions for use
MR	Please do not use the Non-contact Forehead Thermometer in the MRI or MR environments, or it result in inaccurate readings.	IP22	Classification for water ingress and particulate matter.