Technical Specifications

H200 Wireless Control Unit Specifications	
Classification	Internally powered, continuous operation
Operation Modes	User and Standby
Battery Type	Rechargeable AAA NiMH 1.2 V, 900–1100 mAh
Controls	• On/Off illuminated button • Trigger illuminated button to turn on and pause stimulation • Intensity +/- buttons to fine-tune intensity level • Mute button to mute audio alerts • Program selection buttons (1, 2) • Stimulation test button
Indications	• Four status icons: H200 Wireless Control Unit, RF Communication Status, Selected Program (1, 2) • Digital display designates relative stimulation intensity • Illuminated buttons designate system on/off and stimulation on/off or paused. • “Beeps” for audio alerts
Carrying Options	In pocket, neck strap, wrist strap, or belt pouch
Dimensions	Length: 73 mm (2.9 in.); Width: 46 mm (1.8 in.); Height: 18 mm (0.7 in.)
Weight	45 grams (1.5 oz.)
Environmental Ranges	• Transport and storage temperature: -25°C to +70°C (-13°F to +158°F) • Operating conditions temperature: 5°C to 40°C (41°F to 104°F) • Operating conditions relative humidity: 15% to 93% • Charging temperature: 5°C to 40°C (41°F to 104°F)

H200 Wireless Orthosis Specifications	
Classification	Internally powered, continuous operation with type BF applied parts
Operating Voltage	3.7 V
Battery Type	Proprietary rechargeable Li-Ion (Lithium Ion) 3.7 V, 280–350 mAh
Indications	• H200 Wireless Orthosis status (fault, battery, charging) and Stimulation LEDs • “Beeps” for audio alerts
Material	• Main body cover: Rilsan BZM 30 OTL • Wing cover: TEREZ ABS 5010 • Wrist insert: Flexible foam, two components urethane non-integral skin, Purtec GMBH • Thenar: Dow Corning Silicone Rubber NPC 40
Configurations	• Size: Small/Medium/Large • Side: Left and Right • Total of 6 configurations
Environmental Ranges	• Transport and storage temperature: -25°C to +70°C (-13°F to +158°F) • Operating conditions temperature: 5°C to 40°C (41°F to 104°F) • Operating conditions relative humidity: 15% to 93% • Charging temperature: 5°C to 40°C (41°F to 104°F) • IP classification: IP27

H200 Wireless Orthosis Specifications			
	Small	**Medium**	**Large**
Dimensions (closed)	Length: 270 mm (10.63 in.) Width: 110 mm (4.33 in.) Depth: 90 mm (3.54 in.)	Length: 270 mm (10.63 in.) Width: 110 mm (4.33 in.) Depth: 90 mm (3.54 in.)	Length: 300 mm (11.81 in.) Width: 130 mm (5.11 in.) Depth: 130 mm (5.11 in.)
Estimated Weight	300 grams (10.58 oz.)	300 grams (10.58 oz.)	300 grams (10.58 oz.)

H200 Wireless Orthosis Pulse Parameters	
Pulse	Balanced Biphasic
Waveform	Symmetric
Intensity (Peak)	0–80 mA, 1-mA resolution (positive phase)
Maximum Current Intensity (rms)	• Electrodes #1, #2, #3, #5: 13.1 mA rms • Electrode #4: 18.6 mA rms
Max Voltage	120 V

	Symmetric		
Positive Pulse Duration (µsec)	100	200	300
Negative Pulse Duration (µsec)	100	200	300
Inter-Phase Interval (µsec)	50		
Max Total Pulse Duration (µsec)	250	450	650
Load Range	0–5000 ohm (Subject to max voltage limitation)		
Nominal Load	500 ohm		
Max Power Load	500 ohm (80 mA, 120 V)		
Pulse Repetition Rate	20–45 Hz, 5-Hz resolution		
Ramp Up	0–3.1 seconds		
Ramp Down	0–3.1 seconds		
Max. Duration of Stimulation Program	4 hours, 5-minute resolution		

Power Supply Specifications	
Use medical Class II safety approved power supply provided/approved by Bioness with the following ratings:	
Input	
Voltage	100–240 V AC
Current	400 mA
Frequency	50–60 Hz
Output	
Voltage	5 V ± 5%
Current	2400 mA

Note: The H200 Wireless Control Unit and Orthosis can be used while charging if the Control Unit is not connected to the Clinician's Programmer.

H200 Wireless Cloth Electrode Specifications						
Material	Non-woven cloth **Note:** Use only cloth electrodes provided by Bioness Inc.					
Cloth Electrode #	1	2	3 Regular	3 Large	4	5
Area (mm^2)	1784	1185	791	1284	2038	1185
Area ($in.^2$)	2.8	1.8	1.2	2.0	3.2	1.8

Wireless Technology Description	
Wireless Link Specifications	
Frequency Band	2.4 GHz, ISM band
Transmission Power	Complies with FCC 15.247 (for U.S.) regulations/ETSI EN300-440 (For Europe) regulations.
Transmitters	
Operating Frequency Band	2401–2482 MHz
Type of Modulation	FSK
Type of Modulating Signal	Binary data message
Data Rate [=Frequency of Modulating Signal]	250 Kbps
Effective Radiated Power	<10 dBm
Receivers	
Operating Frequency Band	2401–2482 MHz
Receiver Bandwidth	812 kHz around a selected frequency