

## Component Technical Specifications

<b>Control Unit Specifications</b>	
<b>Classification</b>	Internally powered, continuous operation
<b>Operation Modes</b>	Gait, Training, Clinician, and Standby
<b>Battery Type</b>	Rechargeable AAA NiMH 1.2 V, 900–1100 mAh
<b>Controls</b>	On/Off illuminated button Mode illuminated button for changing operating modes Intensity +/- buttons to fine-tune intensity level Volume buttons to adjust volume of audio alerts
<b>Indications</b>	Three status LEDs: Control Unit, RF Stim Unit, and Intelli-Sense Gait Sensor Numerical display designates relative stimulation intensity Illuminated buttons designate system operating mode “Beeps” for audio alerts
<b>Carrying Options</b>	In pocket, neck strap, wrist strap, or belt pouch
<b>Dimensions</b>	Length: 73 mm (2.9 in.) Width: 46 mm (1.8 in.) Height: 18 mm (0.7 in.)
<b>Weight</b>	45 grams (1.5 oz.)
<b>Environmental Ranges</b>	Transport and storage temperature: -20°C to +60°C (-4°F to +140°F) Operating conditions temperature: 5°C to 40°C (41°F to 104°F) Charging temperature: 5°C to 40°C (41°F to 104°F) Relative humidity: 25% to 85% Atmospheric pressure: 900 hPa to 1060 hPa

<b>RF Stim Unit Specifications</b>	
<b>Classification</b>	Internally powered, continuous operation with type BF applied parts
<b>Operating Voltage</b>	3.7 V
<b>Battery Type</b>	Proprietary rechargeable Li-Ion (Lithium Ion) 3.7 V, 700 mAh
<b>Indications</b>	Status (fault, battery, charging) and Stimulation LEDs “Beeps” for audio alerts
<b>Dimensions</b>	Length: 74 mm (2.9 in.) Width: 43 mm (1.7 in.) Height: 15 mm (0.6 in.)
<b>Weight</b>	50 grams (1.6 oz.)
<b>Environmental Ranges</b>	Transport and storage temperature: -20°C to +60°C (-4°F to +140°F) Operating conditions temperature: 5°C to 40°C (41°F to 104°F) Charging temperature: 5°C to 40°C (41°F to 104°F) Relative humidity: 25% to 85% Atmospheric pressure: 900 hPa to 1060 hPa

<b>Pulse Parameters</b>	
<b>Pulse</b>	Balanced Biphasic
<b>Waveform</b>	Symmetric or Asymmetric
<b>Intensity</b>	0–80 mA, 1-mA resolution (positive phase)
<b>Max Voltage</b>	120 V

	Symmetric			Asymmetric		
<b>Positive Pulse Duration (μsec)</b>	100	200	300	100	200	300
<b>Negative Pulse Duration (μsec)</b>	100	200	300	400	800	1200
<b>Inter-Phase Interval (μsec)</b>	50			0		
<b>Total Pulse Duration (μsec)</b>	250	450	650	500	1000	1500
<b>Max Load</b>	5000 ohm (Subject to max voltage limitation)					
<b>Pulse Repetition Rate</b>	20–45 Hz, 5-Hz resolution					
Gait Parameters						
<b>Ramp Up</b>	0–2 seconds, 0.1-second resolution					
<b>Ramp Down</b>	0–2 seconds, 0.1-second resolution					
<b>Extend (Delay)</b>	0–100% of stance time, 10% resolution					
<b>Max. Duration of Stimulation</b>	2–10 seconds, 1-second resolution					
Training Parameters						
<b>On Time</b>	4–20 seconds, 1-second resolution					
<b>Off Time</b>	4–60 seconds, 1-second resolution					
<b>Ramp Up</b>	0–2 seconds, 1-second resolution					
<b>Ramp Down</b>	0–2 seconds, 1-second resolution					
<b>Total Time</b>	1–60 minutes					

<b><i>FS Cuff Specifications</i></b>	
<b>Material</b>	Fabric-Polymer
<b>Fits Limb Circumference</b>	29–51 cm (11–20 in.)
<b>Dimensions</b>	Height: 160 mm (6.3 in.) Width: 100 mm (3.9 in.) Depth: 125 mm (4.9 in.)
<b>Weight</b>	Approximately 150 grams (4.8 oz.)

<b><i>Intelli-Sense Gait Sensor Specifications</i></b>	
<b>Classification</b>	Internally powered, continuous operation with type BF applied part(s)
<b>Battery Type</b>	Lithium coin cell, CR2430, 280 mAh
<b>Dimensions of the Transmitter</b>	Length: 80 mm (3.2 in.) Width: 50 mm (2.0 in.) Height: 10 mm (0.4 in.)
<b>Weight</b>	35 grams (1.1 oz.)
<b>Environmental Ranges</b>	Transport and storage temperature: -20°C to +60°C (-4°F to +140°F) Operating conditions temperature: 5°C to 40°C (41°F to 104°F) Relative humidity: 25% to 85% Atmospheric pressure: 900 hPa to 1060 hPa

***Power Supply Specifications***

**Use medical Class II safety approved power supply provided/approved by Bioness with the following ratings:**

<b>Input</b>	
<b>Voltage</b>	100–240 V AC
<b>Current</b>	200 mA
<b>Frequency</b>	50–60 Hz
<b>Output</b>	
<b>Voltage</b>	5 V $\pm$ 5%
<b>Current</b>	1300 mA

**Note:** Do not use the Control Unit or RF Stim Unit while charging.

***Wireless Link Specifications***

<b>Frequency Band</b>	2.4 GHz, ISM band
<b>Transmission Power</b>	Complies with FCC 15.247 (for U.S.) / ETSI EN 300-440 (for Europe) regulations

***Hydrogel Electrode and Electrode Base Specifications***

<b>Electrodes</b>	Two, 45-mm (1.77-in.) diameter hydrogel electrodes <b>Note:</b> Use only electrodes provided by Bioness Inc
<b>Electrode Bases</b>	Two relocatable polymer electrode bases for individual fitting