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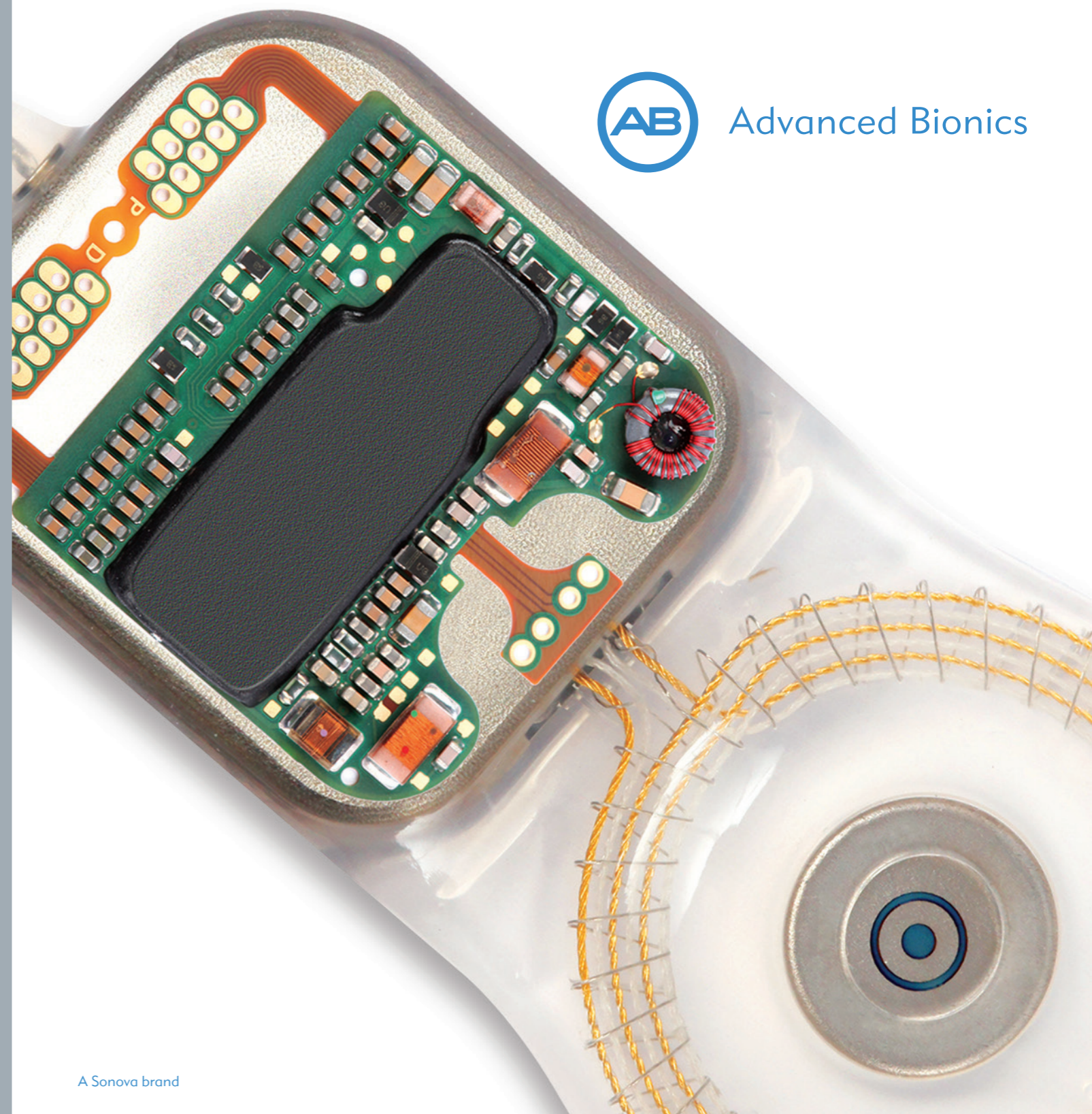
For information on additional AB locations, please visit  
[AdvancedBionics.com/contact](http://AdvancedBionics.com/contact)

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Check with local AB representative for regulatory approvals in your area.



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## TECHNICAL SPECIFICATIONS

### HiRes™ Ultra Cochlear Implant

with the HiFocus™ SlimJ and HiFocus™ Mid-Scala Electrodes

# Designed for Discreet Surgery and to Protect the Delicate Cochlea Structures

The new, thin HiRes Ultra Cochlear Implant is designed to provide straightforward surgery, and improved MRI capabilities with the proven benefits and upgradeability of AB's HiRes implant platform.

Developed with leading cochlear implant surgeons and using state-of-the-art manufacturing processes, the HiRes Ultra with the HiFocus SlimJ and HiFocus Mid-Scala electrodes offer unique features designed to suit individual patient anatomy and surgical preferences for the best possible hearing outcomes.



side view



HiRes™ Ultra Cochlear Implant



HiFocus™ Mid-Scala electrode



HiFocus™ SlimJ electrode

## IMPLANT TECHNICAL SPECIFICATIONS

Information Update Rate	90 kHz
Stimulation Rate	Up to 83,000 pps (software limited)
Independent Output Circuits	16
Spectral Bands	Up to 120 sites of stimulation (software limited)
Communication Link	Bi-directional inductive link
IntelliLink™ Safety Feature	Implant and processor association
Diagnostics	Neural response imaging (NRI), impedance measurements, ESRT, Integrity Testing
ADC Resolution Sampling Rate	Resolution: 9 bits; Sampling Rate: 25 kHz
Pulse Amplitude	0 - 2040 uA
Pulse Width	10.78 - 229 uS
Impedance Accuracy	2.5 kohm

## STIMULATION DELIVERY SPECIFICATIONS

HiRes Fidelity 120™ Strategies	HiRes Optima*-P (paired), HiRes Optima*-S (sequential), ClearVoice™*, HiRes-P with Fidelity 120™** (paired), HiRes-S with Fidelity 120™** (sequential)
HiResolution™ Sound Strategies	HiRes-P (paired) and HiRes-S (sequential)
Conventional Strategies	CIS and MPS Modes

## IMPLANT MATERIALS AND DIMENSIONS

Titanium Case	4.5 mm thin titanium case in silicone
Antenna Coil	3.6 mm thin antenna coil in silicone
Housing	25/28.5 mm x 56.2 mm flexible silicone
Weight	11 grams
Volume	4800 mm <sup>3</sup>
Magnet **	Can be left in place for 1.5T MRI scans when using the bandaging protocol, or can be removed for 1.5T or 3.0T MRI scans. See the MRI section of the HiRes Ultra surgeon's manual.
Telemetry Coil	Gold-braided wire and platinum-shield wire in flexible silicone, reinforced with high-density polymer fiber
Ground	2 — Case ground and ring electrode ground
Impact Resistance Value	Exceeds the impact requirements specified in EN45502-2-3:2010
Pressurized Environment Information	Can withstand a pressure up to a depth of 42m under water (138 feet) or a gauge pressure of 4ATM (413kPa)

## ELECTRODES TECHNICAL SPECIFICATIONS

	HiFocus SlimJ	HiFocus Mid-Scala
Electrodes	16 platinum contacts; platinum-iridium wires; flexible silicone carrier; integrated ground on lead	
Minimum Exposed Contact Area	0.12 mm <sup>2</sup>	0.12 mm <sup>2</sup>
Contact Spacing	1.3 mm	0.975 mm
Active Length	~20 mm	~15 mm
Forceps	Yes	***
Insertion Tool	-	Optional
Freehand	Yes	Yes
Reloadable	-	2 Maximum
Insertions	3 Maximum	3 Maximum
Recommended Insertion	Round window, extended round window and cochleostomy	

\* Not approved for pediatric use in the United States.

\*\* Center must contact AB prior to MRI procedure.

\*\*\* Jeweler's forceps or a similar instrument can be used