

## HS3100/HS2100 Rugged Headsets

### Rugged bluetooth and corded HD Voice headsets for the most demanding industrial environments

When it comes to enabling speech-driven applications and voice communications in warehouses, manufacturing plants and outdoor yards, you need a headset that is specially designed for the job. The HS3100 Bluetooth and HS2100 corded headsets are loaded with features that offer everything you need in an industrial headset — a rugged design for a superior total cost of ownership, HD Voice for unparalleled audio clarity, consumer styling, exceptional comfort and ease of use, a modular design and plenty of battery power to keep Bluetooth models up and running throughout the longest shift. And the HS3100 cordless model gives workers the freedom to walk as far as 30 ft./10 m from the mobile device. Give your workers the superior voice experience they need to maximize productivity in your speech-directed applications with the HS3100 and HS2100 rugged headsets — only from Zebra.



#### **HD Voice Brings Incredible Audio Clarity to Cordless and Corded Models**

Support for HD Voice, also known as Wide Band audio, provides superior voice quality and clarity on all models. Standard phone calls utilize 300 Hz to 3.4 kHz bandwidth — but HD Voice utilizes 50 Hz to 7 kHz bandwidth, providing an additional two and a half octaves of voice information. The result is a rich and natural sounding voice with a dramatic improvement in clarity — bringing a new level of accuracy to speech-directed applications, such as voice-directed picking.

#### **Built to Handle Everyday Inevitable Drops**

There's no way around it — headsets will be subjected to frequent drops. Not a problem with the HS3100 and HS2100. These rugged headsets continue to operate reliably after 6 ft./1.8 m drops to concrete and 1,000 consecutive 1.6 m ft./0.5 m drops in our tumble drum, simulating the real-world tumbling that takes place after a drop.

#### **Dustproof, Sprayproof and Waterproof**

With IP67 sealing, the HS3100 and HS2100 headsets are virtually impervious to dust and will operate reliably, even after a hose down with high-power jetting water or complete immersion in water.

#### **Ready for the Freezer and Outdoor Subzero Temperatures**

Both headsets are ready for your coldest environments, delivering reliable operation in subzero temperatures as low as -22° F/-30° C.

#### **Feather-light for Extraordinary Comfort**

At 3.5 oz./98 g for the corded HS2100 and 4 oz./115 g for the Bluetooth HS3100, your workers will barely feel these feather-weight headsets.

#### **Superior Noise Cancellation Technology**

Effectively eliminates background noise to protect productivity. There is no need to repeat information, even in the noisiest environments.

**Give your workers a superior voice experience in your most demanding industrial environments with the HS3100/HS2100 headsets.**

For more information about the HS3100/HS2100 rugged headsets, visit [www.zebra.com/hsheadsets](http://www.zebra.com/hsheadsets)

### **Swap Batteries on the Fly — Without Losing the Bluetooth Connection**

With a hot-swappable battery, your users can replace the battery without having to re-pair to the host mobile computer, such as Zebra's WT6000 wearable computer.

### **Customizable Wearing Styles**

Your users can choose their own wearing style — over-the-head or behind the neck. Since the boom swivels 290°, workers using the over-the-head wearing style can easily switch between the right and left ear at a any time. When the boom is swiveled, the headset is automatically muted.

### **Split-Second Tap-to-Pair Simplicity**

The integrated NFC allows users to just tap the HS3100 headset on the host mobile computer to pair — no more scanning barcodes, manually configuring devices for discovery or accidentally pairing another nearby device.

### **Detachable Swivel Microphone Boom Minimizes Costs**

Give each worker a headband as their personal item to customize with their choice of pads, and maintain a smaller pool of booms to be shared between shifts. At the start of their shift, workers can just snap on a boom, pair it with a tap and they are ready to go within seconds. There is no need to purchase a complete headset for every worker, greatly reducing your capital costs and your total cost of ownership.

### **User-Replaceable Pads and Windscreens Maximize Comfort and Hygiene**

Your workers can customize their headset with foam or leatherette ear pads, headband pads and temple pads — and easily replace these low cost items when they wear out. In addition, workers can put their own windscreens on the boom microphone for added hygiene.

### **15 Hours of Battery Power for Bluetooth Models**

Plenty of power for a long shift protects worker productivity — workers never need to waste time searching for a replacement battery.

### **Easy to Clean**

The plastics are made to withstand wipedowns, preventing the spread of germs through shared booms.

# Specifications

## Markets and Applications

### Physical Characteristics

Weight	HS2100 corded model: 3.5 oz./98 g (without audio cable) HS3100 Bluetooth model: 4 oz./115 g (with battery)
Wearing Styles	<ul style="list-style-type: none"><li>• Over-the-head headband</li><li>• Behind-the-neck headband</li></ul>
Field Replaceable Parts	HS2100: Headband, ear pad, windsock, headband pad, temple pad HS3100: Headband, battery, ear pad, windsock, headband pad, temple pad
Power	Applies to HS3100 only: Li-Ion 220 mAh, 3.7V with up to 15 hours of continuous speech use on a single charge using a battery with 100 charge/discharge cycles

### Performance Characteristics

Speech-Directed Applications	Can work with all Zebra devices running speech recognition and text-to-speech engines for speech-directed applications
Audio	High performance sealed noise canceling microphone with noise immunity greater than 10 dB for high noise environments
Send Frequency Response	50 Hz to 8 kHz
Microphone Sensitivity	-53dB @ 1kHz, 1Pa
Receive Frequency Response	300 Hz to 6 kHz
Speaker Sensitivity	89 dB SPL with 1.0Vrms @1 kHz
Bluetooth	Applies to HS3100 only: Bluetooth Class II, v 3.0; Bluetooth Hands-free Profile (HFP 1.6), HSP 1.2, A2DP profile
NFC	Applies to HS3100 only: NFC tag used for Tap-to-Pair

### User Environment

Zebra Mobile Computers Compatibility	Please visit <a href="http://www.zebra.com/hsheadsets">www.zebra.com/hsheadsets</a> for the most current list of compatible mobile computers.
User Interfaces	HS2100: Two 3.5 mm audio jack sockets HS3100: LED: Bi-color LED for headset status Buttons: Three functional buttons
Operating Temp.	-30°C (-22°F) to +50°C (+122°F)
Storage Temp.	HS2100: -40°C (-40°F) to +70°C (+158°F) HS3100: -40°C (-40°F) to +60°C (+140°F) incl. battery -40°C (-40°F) to +70°C (+158°F) excl. battery
Sealing Rating	IEC 60529: IP67
Humidity	5% to 95% non-condensing
Drop Rating	6 ft. /1.8 m drop to concrete (36 drops, over operating temperature range)
Tumble Rating	1,000 tumbles @ 0.5 m (room temperature)
Vibration	Sine 5-2000Hz, 4g peak, 1 hour per axis;

### Software Compatibility

TekSpeech Pro 4, Android EMDK

### Recommended Services

Zebra OneCare

### Warranty

HS2100: Subject to the terms of Zebra's hardware warranty statement, the HS2100 is warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For complete warranty statement, please visit: <https://www.zebra.com/warranty>  
HS3100: Subject to the terms of Zebra's hardware warranty statement, the HS3100 is warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For complete warranty statement, please visit: <https://www.zebra.com/warranty>

### Footnotes

Specifications subject to change without notice.

### Industries

- Warehousing
- Distribution
- Transportation and Logistics
- Manufacturing

### Environments

- Freezers
- Outdoor yards
- Airports
- Seaports
- Railway yards

## User Environment

	Random 20-2000Hz, 6g RMS or 0.04g <sup>2</sup> /Hz, 1 hour per axis
Electrostatic Discharge (ESD)	+/-20kV air discharge, +/-10kV contact discharge, +/-10kVdc indirect discharge



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