

## USB-3000™

(featuring the AMBE-3000™ Vocoder Chip!)

### Benefits

- DVSI's AMBE-3000™ Vocoder Chip Technology via USB.
- Encode and decode files to/from a PC through the USB interface.
- Virtual Com port design allows for flexible implementation into a variety of configurations.
- Utilize the AMBE-3000™ Vocoder Chip's advanced capabilities such as Soft decision FEC, Voice Activity Detection (VAD), adaptive Comfort Noise Insertion (CNI) and DTMF tones.
- The USB-3000™ comes with sample control software and reference documentation.
- Compatible with Window XP and Vista.
- Create a multi-channel system with additional USB-3000™ devices.

Digital Voice Systems, Inc. (DVSI) USB-3000™ Device is the perfect combination of the AMBE-3000™ Vocoder Chip with a USB interface. Simply connect the USB-3000™ to a Windows based PC's USB interface and get direct access to DVSI's AMBE-3000™ Vocoder Chip. This connection allows users to configure vocoder rate and options, as well as, encode and decode files, or process real time speech.

Since the USB-3000™ is built using the AMBE-3000™ Vocoder Chip, all of the features and benefits of DVSI's patented AMBE® Vocoder technology are now available through a USB connection. The AMBE® voice compression technology has been thoroughly evaluated and tested under various conditions. It has been implemented and field proven by a wide variety of manufacturers around the world. The true value of the AMBE® vocoder is in providing a 2-3x improvement in channel capacity while maintaining a high performance level. It has been proven in critical applications such as digital mobile radio, satellite communication systems and in other wireless communication devices. The success of this vocoder technology has resulted in it being chosen for many mobile radio programs, including APCO Project 25, DMR, dPMR and many others.



*Experience the voice quality and performance of DVSI's AMBE® Vocoder, in one easy to use device! Great for vocoder evaluation or implementation into a real-time communication system.*

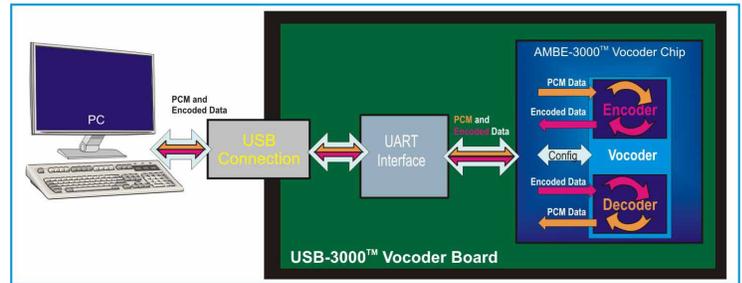
The flexibility of the USB-3000™ comes from the embedded AMBE-3000™ Vocoder Chip that can operate at virtually any data rate from 2000 bps to 9600 bps. This variety of speech and/or FEC rates permits vocoder optimization within system requirements that leads to excellent voice quality with superior robustness to bit errors and acoustic background noise. Also, the USB-3000™ benefits from the AMBE-3000™ 's advanced features such as: Voice Activity Detection (VAD), adaptive Comfort Noise Insertion (CNI) and support for DTMF tones.

The value of DVSI's USB-3000™ goes beyond its simplistic design. The USB-3000™ can also prove itself as a comprehensive, evaluation, test and development platform. Based on the AMBE® vocoder the USB tool enables users to explore the capabilities and benefits of the AMBE® low-bit-rate vocoder in real-time without investing in large amounts of engineering time and hardware prototypes. This multipurpose vocoder tool is ideal for the reference design for evaluation and test of DVSI's vocoder performance. Once a new product design is complete and manufacturing begins the USB-3000™ can then be used to simulate actual system conditions as a calibrated quality control reference standard.

*A low cost solution with off-the-shelf availability!*

The heart of USB-3000™ is the AMBE-3000™ Vocoder Chip that incorporates DVSI's patented AMBE+2™ Voice Compression technology. The AMBE-3000™ Vocoder Chip is configured so that all speech and channel data to/from the USB-3000™ is formatted into packets. In this packet mode the USB-3000™ sends a packet in response to every packet received. With the inclusion of the USB interface the USB-3000™ allows users to connect to a Windows based PC, to transmit/receive speech and compressed data packets, as well as, configure vocoder options and monitor vocoder status information.

The USB-3000™ is available off the shelf and requires no up-front licensing fees or royalties. The USB-3000™ can be a low cost alternative to a fully customized implementation of the AMBE-3000™ vocoder chip. Original equipment manufacturers can efficiently design the USB-3000™ into an affordable high performance low-bit-rate communication system without the risks and high development cost associated with a DSP implementation or customized hardware. This makes the USB-3000™ ideal component in the production of low-volume military and commercial applications (including Digital Mobile Radio) that are cost effective to design and inexpensive to operate.



The USB-3000™ is a complete hardware package comes with software and documentation that allows the user to quickly install and begin to process speech data. Technical documentation includes a USB-3000™ Users manual and the AMBE-3000™ User's Manual.

DVSI's dedicated staff combine years of experience in vocoder technology, with expertise in Digital Signal Processing, computer software generation and hardware development. For more information regarding our high-performance voice compression solutions, contact DVSI today.

Digital Voice Systems, Inc. specializes in the development of low-bit-rate, high quality voice compression products incorporating their patented IMBE™, AMBE® AMBE+™ and AMBE+2™ Voice Compression Technologies. DVSI software and hardware voice compression products are successfully implemented in both private and standards-based digital communication systems worldwide. DVSI's Speech Compression technology is the core component that enables original equipment manufacturers to produce innovative designs with an array of advanced features.

### Technical Specifications

<u>Digital Connection:</u>	USB Serial Port
<u>Power Requirement:</u>	5 V DC Bus powered
<u>Physical:</u>	
Size	2.5" x 1.0" x 0.5"
Weight	< 1.0 oz.

(Specifications subject to change.)

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