



The **BSS Soundweb OMNI 32e** Open Architecture I/O Expander offere the ability to onramp and offramp Analog/ AES3 to/from Soundweb OMNI 512p and 256p Digital Signal Processors. The 32e converts these signals to and from Dante/AES67 for processing by Soundweb OMNI DSPs. The all-new design ensures the seamless handling of today's most complex installations to be future-ready to meet the evolving needs of tomorrow.

The 32e features 8x8x8 Analog or 16x16x16 AES3 audio channels; 32x32 Dante/AES67 networked audio I/O channels; 24 GPIO ports (fully flexible); enterprise-grade network security; studio quality 60dB microphone preamp on all inputs; high resolution DAC and ADC, primary and secondary Dante connections, redundant HControl ports; full-color, front panel LCD with metering, stereo AES3 on every audio connector; and more.

Each audio I/O port on Soundweb OMNI I/O Expanders is format configurable as either analog or stereo AES3 and eight of the audio I/O ports are also configurable to be either inputs or outputs. All GPIO ports are configurable as either input or output ports, and their format can be either analog or digital.

With support for centralized or distributed DSP topologies, system integrators can add as many Soundweb OMNI processors to a single project file as needed, while still enjoying the simplicity of a single canvas for device configuration.

HARMAN's HControl protocol, a human-readable, standardsbased, developer-triendly API is also supported. It offers an intuitive, flexible, and powerful alternative to other protocols to support developers working at any scale.

Soundweb OMNI systems are configured, controlled, and monitored with the AVX software suite through two user-friendly applications. AVX Architect is a desktop app for system diagramming, device configuration, network management, and custom UI design. An unlimited number of processors and expanders can be added to a single project file. AVX Control is a lightweight app offering easy access to custom UIs for controlling and monitoring Soundweb OMNI devices, via Windows, iOS, macOS, Android, and AMX Varia touch panels. These custom UIs also work with Crown DCi amplifiers and previous generation Soundweb London devices.

Built on decades of innovation, BSS Soundweb OMNI is a highly scalable and flexible DSP solution. Combining powerful hardware,

intuitive software, and developer-friendly features, it effortlessly scales to meet the needs of any installed application. Experience BSS-Soundweb OMNI, the new standard in open architecture DSP.

FEATURE HIGHLIGHTS

- 8x8x8 Analog/AES3 audio input, output, and flex channels
- 32x32 Dante/AES67 networked audio channels
- 24 GPIO ports (fully flexible)
- Studio-quality 60dB microphone pre-amp on all inputs
- High resolution DAC and ADC
- Primary and secondary Dante connections
- Redundant HControl ports
- Full-color, front panel LCD with metering
- Stereo AES3 on every audio connector
- Enterprise-grade network security support
- Choice of centralized or distributed DSP topologies
- Unlimited number of Soundweb OMNI Expanders can be added to a single project file
- Configurable, controllable and monitorable with AVX software suite
- HARMAN HControl protocol supported
- Private and Public Routing for Dante

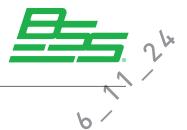
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Soundweb OMNI 32e

Open Architecture I/O Expander



GENERAL SPECIFICATIONS

POWER	and the second
Voltage Input	100 - 240
Power Input	200 Watts
Current Input	2.1A @ 120 VAC - 1.1A @ 240 VAC
Redundancy	100 - 240 200 Watts 2.1A @ 120 VAC - 1.1A @ 240 VAC None
THERMAL	C,X,
Operating Temp Range	0° - 45° C
Storage Temp	-20° - 60° C
Heat Output	< 415 BTU/Hr
AUDIO I/O	Analog = 8 in, 8 out, 8 flex, AES3 Digital = 16 in, 16 out, 16 flex
ANALOG INPUTS	
Mic/Line inputs	(1dB steps): 0-60dB 2.4kohms (balanced) +27dBu
Input Impendence	2.4kohms (balanced)
Maximum Input Level	+27dBu
CMRR	> 75 dB @ 1kHz (typical)
Input Noise (E.I.N)	< -125dBu with 150ohm source (typical)
Phantom Power	+48VDC (current is TBD
Latency (ADC) @48kHz/96kHz	TBD
ADC bit depth	24bits
DIGITAL INPUTS	
Input Impedance	110 ohms
Sample Rate	48/96kHz
Sample Rate Conversion	24.1/48/96kHz
THD+N	< -130dB
Latency	TBD
Frequency Response	20Hz to 20kHz
Dynamic Range	> 140dB
ANALOG OUTPUTS	
Maximum Output Level	+27dBu
Frequency Response	20Hz to 20kHz, +/- 0.5dB
СНТ	0dB gain, 10dBu input, < 0.001%
Dynamic Range	> 110dB
Crosstalk	TBD
Latency (DAC) @48kHz/96kHz	TBD
Bit Depth	24bits
Frequency Response	20Hz to 20kHz, +/- 0.5dB

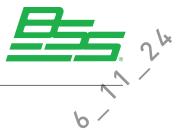
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GENERAL SPECIFICATIONS (Cont.)

Sample Rate Conversion < -130dB THD+N < -130dB Latency TBD ACOUSTIC Fan Noise 30 dB SPL A-Weighted at max temperature 25 db SPL A-weighted at 25C CONTROL PORTS Control Input Voltage 12 Volts Max Logic Output Voltage 12 Volts Max Logic Output Voltage 12 Volts Max Logic Output Impedance 32k Ohms Logic Output Impedance 10 Ohms Logic Output Impedance 10 Ohms Logic Output Current 60mA source, 20mA sink CONTROL NETWORK Connectivity 2x RJ-45 Gigabit Ethernet Inclundant! Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK Capacity 12 Grannets Latency HD FRONT PANEL Main Operation LCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixel Indicators Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING Size 1 RU:	Output Impedance	110ohms
Fan Noise 30 dB SPL A-Weighted at max temperature 25 db SPL A-weighted at 25C CONTROL PORTS 2 Volts Max Control Input Voltage 12 Volts Max Logic Output Impedance 32k 0hms Logic Output Umpedance 00 hms Logic Output Current 60mA source, 20mA sink Control Input Notage 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK 2x RJ-45 Gigabit Ethernet (redundant) Protocol Dante/AE567 Capacity 16 biannels Latency HBD FRONT PANEL Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weapth 13b, 5.9 kg	Sample Rate	48/96kHz
Fan Noise 30 dB SPL A-Weighted at max temperature 25 db SPL A-weighted at 25C CONTROL PORTS 2 Volts Max Control Input Voltage 12 Volts Max Logic Output Impedance 32k 0hms Logic Output Umpedance 00 hms Logic Output Current 60mA source, 20mA sink Control Input Notage 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK 2x RJ-45 Gigabit Ethernet (redundant) Protocol Dante/AE567 Capacity 16 biannels Latency HBD FRONT PANEL Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weapth 13b, 5.9 kg	Sample Rate Conversion	4
Fan Noise 30 dB SPL A-Weighted at max temperature 25 db SPL A-weighted at 25C CONTROL PORTS 2 Volts Max Control Input Voltage 12 Volts Max Logic Output Impedance 32k 0hms Logic Output Umpedance 00 hms Logic Output Current 60mA source, 20mA sink Control Input Notage 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK 2x RJ-45 Gigabit Ethernet (redundant) Protocol Dante/AE567 Capacity 16 biannels Latency HBD FRONT PANEL Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weapth 13b, 5.9 kg	THD+N	< -130dB
Fan Noise 30 dB SPL A-Weighted at max temperature 25 db SPL A-weighted at 25C CONTROL PORTS 2 Volts Max Control Input Voltage 12 Volts Max Logic Output Impedance 32k 0hms Logic Output Umpedance 00 hms Logic Output Current 60mA source, 20mA sink Control Input Notage 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK 2x RJ-45 Gigabit Ethernet (redundant) Protocol Dante/AE567 Capacity 16 biannels Latency HBD FRONT PANEL Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weapth 13b, 5.9 kg	Latency	TBD
Fan Noise 30 dB SPL A-Weighted at max temperature 25 db SPL A-weighted at 25C CONTROL PORTS 2 Volts Max Control Input Voltage 12 Volts Max Logic Output Impedance 32k 0hms Logic Output Umpedance 00 hms Logic Output Current 60mA source, 20mA sink Control Input Notage 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK 2x RJ-45 Gigabit Ethernet (redundant) Protocol Dante/AE567 Capacity 16 biannels Latency HBD FRONT PANEL Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weapth 13b, 5.9 kg	ACOUSTIC	
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CONTROL NETWORK Connectivity 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK Connectivity Connectivity 2x RJ-45 Gigabit Ethernet (redundant) Protocol Dante/AES67 Capacity 46 channels Latency HBD FRONT PANEL LCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixel Indicators Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING 18b, 5.9 kg Date Image 17 in X 19.0 in X 17.5 in) Weight 13lb, 5.9 kg	CONTROL PORTS	
CONTROL NETWORK Connectivity 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK Connectivity Connectivity 2x RJ-45 Gigabit Ethernet (redundant) Protocol Dante/AES67 Capacity 46 channels Latency HBD FRONT PANEL LCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixel Indicators Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING 18b, 5.9 kg Date Image 17 in X 19.0 in X 17.5 in) Weight 13lb, 5.9 kg	Control Input Voltage	12 Volts Max
CONTROL NETWORK Connectivity 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK Connectivity Connectivity 2x RJ-45 Gigabit Ethernet (redundant) Protocol Dante/AES67 Capacity 46 channels Latency HBD FRONT PANEL LCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixel Indicators Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING 18b, 5.9 kg Date Image 17 in X 19.0 in X 17.5 in) Weight 13lb, 5.9 kg	Control Input Impedance	32k Ohms
CONTROL NETWORK Connectivity 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK Connectivity Connectivity 2x RJ-45 Gigabit Ethernet (redundant) Protocol Dante/AES67 Capacity 46 channels Latency HBD FRONT PANEL LCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixel Indicators Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING 18b, 5.9 kg Date Image 17 in X 19.0 in X 17.5 in) Weight 13lb, 5.9 kg	Logic Output Voltage	12 Volts Max
CONTROL NETWORK Connectivity 2x RJ-45 Gigabit Ethernet (redundant) Protocol H-Control Max Cable Length 328 Feet/ 100 Meters AUDIO NETWORK Connectivity Connectivity 2x RJ-45 Gigabit Ethernet (redundant) Protocol Dante/AES67 Capacity 46 channels Latency HBD FRONT PANEL LCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixel Indicators Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING 18b, 5.9 kg Date Image 198, 5.9 kg	Logic Output Impedance	10 Ohms
Connectivity2x RJ-45 Gigabit Ethernet (redundant)ProtocolH-ControlMax Cable Length328 Feet/ 100 MetersAUDIO NETWORKConnectivity2x RJ-45 Gigabit Ethernet (redundant)ProtocolDante/AES67Capacity16 channelsLatencyTBDFRONT PANELMain OperationLCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixelIndicatorsDante Link, Hcontrol Link, activity, PSU HealthLocatorFront and RearMOUNTINGSize1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in)Weight13lb, 5.9 kg	Logic Output Current	60mA source, 20mA sink
ProtocolH-ControlMax Cable Length328 Feet/ 100 MetersAUDIO NETWORKConnectivity2x RJ-45 Grabit Ethernet (redundant)ProtocolDante/AES67Capacity16 channelsLatencyIBDFRONT PANELMain OperationLCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixelIndicatorsDante Link, Hcontrol Link, activity, PSU HealthLocatorFront and RearMOUNTING181b, 5.9 kgSize1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in)Weight131b, 5.9 kg	CONTROL NETWORK	
Max Cable Length328 Feet/ 100 MetersAUDIO NETWORKConnectivity2x RJ-45 Grabit Ethernet (redundant)ProtocolDante/AES67Capacity16 channelsLatencyTBDFRONT PANELMain OperationLCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixelIndicatorsDante Link, Hcontrol Link, activity, PSU HealthLocatorFront and RearMOUNTINGSizeSize1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in)Weight13lb, 5.9 kg	Connectivity	2x RJ-45 Gigabit Ethernet (redundant)
AUDIO NETWORK Connectivity 2x RJ-45 Grabit Ethernet (redundant) Protocol Dante/AES67 Capacity 16 channels Latency TBD FRONT PANEL Main Operation LCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixel Indicators Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING Size 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weight 13lb, 5.9 kg	Protocol	H-Control
Connectivity2x RJ-45 Gigabit Ethernet (redundant)ProtocolDante/AES67Capacity16 channelsLatencyTBDFRONT PANELEthernet (redundant), LCD screen: 1200 x 221 pixelMain OperationLCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixelIndicatorsDante Link, Hcontrol Link, activity, PSU HealthLocatorFront and RearMOUNTINGI RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in)Size1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in)Weight13lb, 5.9 kg	Max Cable Length	328 Feet/ 100 Meters
Protocol Dante/AES67 Capacity 16 channels Latency 18D FRONT PANEL LCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixel Indicators Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Size 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weight 13lb, 5.9 kg	AUDIO NETWORK	$\mathbf{X}^{\mathbf{V}}$
Capacity 16 channels Latency TBD FRONT PANEL LCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixel Indicators Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weight 13lb, 5.9 kg Dot i Ture 10" eee ElA 210 steendeed	Connectivity	2x RJ-45 Gigabit Ethernet (redundant)
Latency TBD FRONT PANEL Main Operation LCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixel Indicators Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING Size 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weight 13lb, 5.9 kg 10" actor ElA 210 attached	Protocol	Dante/AES67
FRONT PANEL Main Operation LCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixel Indicators Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING Size 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weight 13lb, 5.9 kg	Capacity	16 channels
Main Operation LCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixel Indicators Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING Size 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weight 13lb, 5.9 kg	Latency	CITBD
Indicators Dante Link, Hcontrol Link, activity, PSU Health Locator Front and Rear MOUNTING Size 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weight 13lb, 5.9 kg	FRONT PANEL	
Locator Front and Rear MOUNTING Size 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weight 13lb, 5.9 kg	Main Operation	LCD Screen 135mmx25mm = 5.43" diagonal; LCD screen: 1200 x 221 pixel
MOUNTING Size 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weight 13lb, 5.9 kg	Indicators	Dante Link, Hcontrol Link, activity, PSU Health
Size 1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in) Weight 13lb, 5.9 kg	Locator	Front and Rear
Weight 13lb, 5.9 kg	MOUNTING	
	Size	1 RU: 44mm X 483mm X 445mm (1.7 in X 19.0 in X 17.5 in)
Rack Type 19" per EIA-310 standard	Weight	13lb, 5.9 kg
V	Rack Type	19" per EIA-310 standard
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