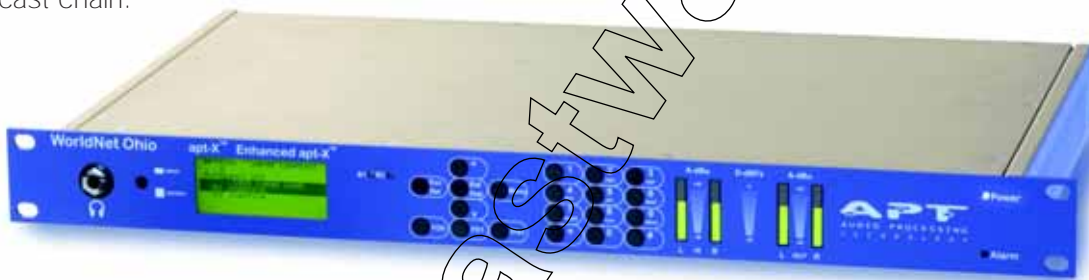


WorldNet Ohio

WorldNet Ohio is a full duplex, low delay, stereo audio codec designed for Studio-to-Transmitter Links and inter-studio networking. The primary X.21 / V.35 data interface is automatically backed up via a single ISDN line for "Mission Critical" applications.

Designed to meet the needs of the most demanding broadcaster, WorldNet Ohio offers an array of features such as Silence Detect, Simultaneous Digital and Analog Outputs, RS232 Auxiliary Data, Contact Closures and Alarm Ports. The unit can also establish and drop a mono / stereo or dual destination call with the activation of a contact input.

The core compression algorithm in WorldNet Ohio is Enhanced apt-X[®], which ensures an end-to-end delay from Station to Transmitter of under 5 milliseconds. Delivering exceptional, near-lossless audio quality with negligible coding delay, the Enhanced apt-X[®] algorithm has become the defacto standard throughout the professional audio industry worldwide. As an ADPCM-based algorithm, Enhanced apt-X[®] is non-destructive in nature and offers resilience to the effects of cascading, making it ideally suited for use in the HD Radio Broadcast chain.



WorldNet Ohio offers key benefits for Studio-to-Transmitter Links:

- X.21 / V.35 interface delivers data rates from 56kbit/s to 576kbit/s
- Fully automated ISDN (128kbit/s) back up
- S or U bus ISDN interface
- Incorporates both Standard and Enhanced apt-X[®]
- Audio bandwidths from 10Hz through to 22.5kHz
- 16, 20 and 24 bit word resolution
- Silence Detect alarm mode
- 5 alarm relays and 4 opto-coupled inputs for remote status
- Speed-dial/redial back-up facility in the event of failure
- RS232 to 9600 baud for additional control and data transmission such as RDS
- Supports both Analog and AES/EBU audio formats
- Headphone monitoring of audio inputs or outputs with volume control
- Control over RS232 / RJ45
- Simultaneous AES/EBU and Analog Outputs
- Dial and Drop on Contact Closure



WorldNet Ohio

Technical Specifications

Physical

Size:	1U x 19" rack mount 44mm x 482mm x 255mm 1.75" x 19" x 10"
Weight	2.25Kg / 5lbs
Power Supply:	100 – 250 VAC, 50-60Hz (optional 48VDC Supply)
Power Consumption:	<25W
Environmental:	0°C to 55°C, 95% humidity

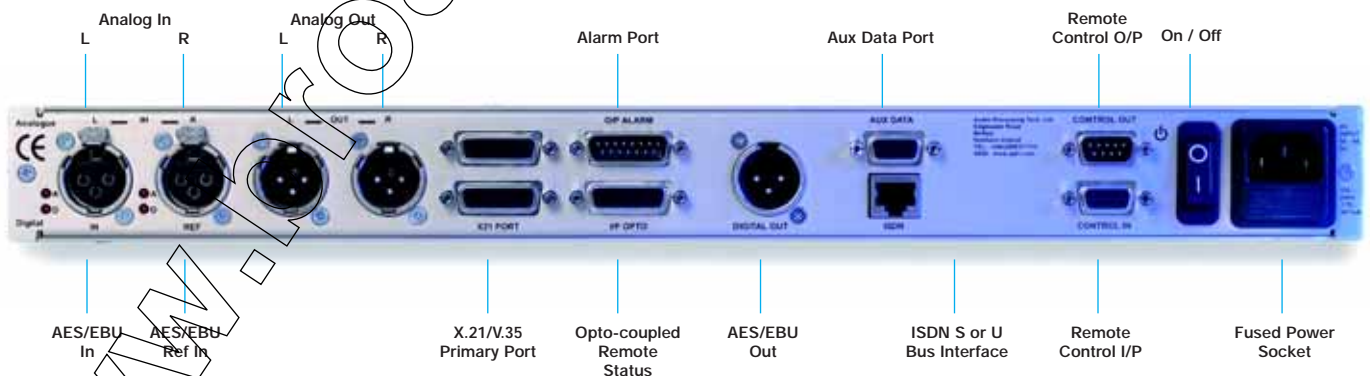
Interfaces

ISDN:	S or U interface, 1 x RJ45 Rates 64-128kbit/s
X.21/V.35:	15 Way D Type DTE Interface RS422 levels Rates 64-576 kbits/s
Aux Data:	9 way D type, RS232 level
Data Rates:	1200, 2400, 4800, 9600 Baud
Digital Operation	Audio I/O, AES/EBU, Balanced XLR-3 Impedance 110 Ohms Digital Reference Input, XLR-3
Analog Operation	Balanced XLR-3 Input Impedance 600 Ohms / >10k Ohms Output Impedance 600 Ohms / >50 Ohms
Alarms	15 way D type
Opto-coupler	15 way D type 4 Inputs driving 4 Relay Outputs
Remote Control	RS232 / RJ45

Audio

Sampling Frequencies:	
Digital Operation	32kHz, 44.1kHz, 48kHz
Analog Operation	8kHz - 48kHz
Sample Rate Converter	3:1 (with bypass modes)
Audio Bandwidth:	
Digital Operation	10Hz to 22.5kHz mono & stereo
Analog Operation	10Hz to 22.5kHz mono & stereo
Source Coding:	Standard apt-X® Enhanced apt-X®
Compression Ratio:	4:1
Coding Delay	
Standard apt-X®	2.5ms @ 48kHz
Enhanced apt-X®	1.9ms @ 48kHz
Dynamic Range	16-bit >85dB 20-bit >105 dB 24-bit >110 dB
Phase Response	Linear: DC to F _s /2
Pass Band Ripple	< -0.2dB

Back Panel View



NB: All specifications are subject to change without notice. All trademarks are copyright.

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