

# WorldCast Horizon

The **WorldCast Horizon** is a fully duplex, two channel stereo codec designed to enable real-time transport of broadcast quality audio over IP networks. Perfectly suited for point to point IP applications, the WorldCast Horizon features Enhanced apt-X<sup>®</sup> coding to ensure highly reliable connections with unparalleled audio quality for AM, FM, DAB and HD Radio broadcasting.

Terminated with a 10Base-T/100Base-TX RJ45 interface, the WorldCast Horizon allows broadcasters to utilise cost-effective data communication links such as WAN or LAN for both audio transport and remote control/supervision. A highly featured and intuitive Network Management System ensures that set-up, configuration and management of the system can be carried out remotely with minimum effort and expense.

With Enhanced apt-X<sup>®</sup> coding as standard, the WorldCast Horizon offers compatibility with all audio over IP codecs within the WorldCast Series. Highly resilient to multiple coding, Enhanced apt-X<sup>®</sup> overcomes the problems associated with multiple psycho-acoustic passes of audio in the broadcast chain. It also offers a unique embedded synchronisation feature, "AutoSync™", which enables the Enhanced apt-X<sup>®</sup> compression algorithm to complement the packetising nature of UDP/IP.

The WorldCast Horizon comes complete with a Network Management Software package providing extensive monitoring and management capability over multiple WorldCast systems throughout a network.



## WorldCast Horizon Features :

- High quality audio transport over IP networks
- Available audio bandwidths from 10Hz through to 24kHz, for FM and HD Radio/DAB applications.
- 16 and 24 bit word resolution
- AES/EBU I/O (AES3), Digital Reference In
- Auxiliary data 1200-9600 Baud for additional data transmission (can be embedded in audio stream or sent via separate IP connection)
- 4 Opto-coupled Inputs and up to 7 Relay Outputs
- Easy to control Network Management System
- Alarm and Event Logging
- Adjustable Silence Detection with alarm output
- "Send on audio" feature (packet generated when audio exceeds user-defined level)



# WorldCast Horizon

## Technical Specification

### Physical

Size	1U x 19" rack mount 44mm x 482mm x 220mm 1.75" x 19" x 10"
Weight	2.5Kg / 5lbs
Power Supply	100-250 VAC, 50-60Hz (optional 48VDC Supply)
Power Consumption	<15W
Environmental	0°C to +55°C, 95% humidity

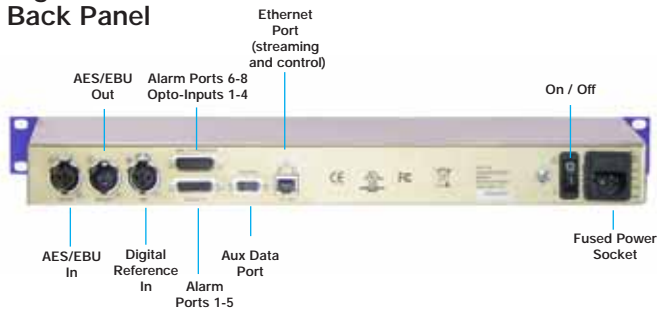
### Interfaces

Network	IP Ethernet 1 x RJ45 RTP running on UDP
Service Type:	DSCP, QoS
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:	8kHz-48kHz
Analog Audio Bandwidth:	0Hz through to 22.5kHz mono & stereo
Alarms:	8 Alarms on 2 x 15 way D Type: 1 Power Fail Alarm plus either 4 Opto-inputs driving 4 Relay Outputs and 3 Configurable Alarms or 7 Configurable Alarms

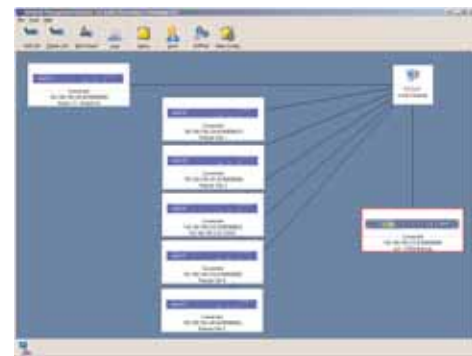
### Audio

Sampling Frequencies:	32, 44.1 and 48kHz
Digital Audio Bandwidth:	10Hz through to 22.5kHz mono & stereo
Sample Rate Converter	3:1 (with bypass modes)
A/D Converter:	24-bit/96kHz sigma-delta
Source Coding:	Enhanced 16, & 24 bit apt-X®
Compression ratio:	4:1
Coding Delay:	1.9ms @ 48kHz Fs
Dynamic Range:	16 bit >85dB 24 bit >110dB

### Digital Unit Back Panel



## Network Management System



Highly Intuitive Graphical User Interface allows control of multiple units from a single PC. Overview screen enables identification of errors anywhere on the network at a glance.



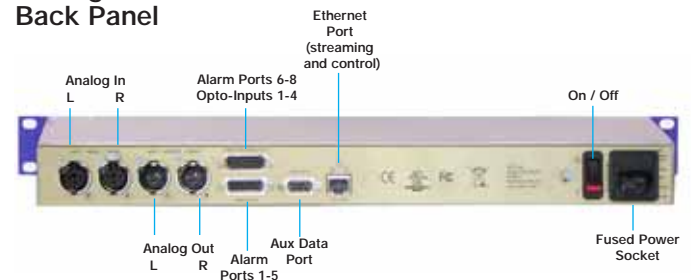
Audio Configuration menus show level bars and offer extensive control over audio algorithm and bandwidth.



Set-up and configure all WorldCast systems in an IP network. Performance Monitoring provides comprehensive statistics on audio, IP and aux data links as well as buffer levels.

**Note:** The WorldCast Horizon is available as either an Analog or AES/EBU unit. Please specify which version is required at time of ordering.

### Analog Unit Back Panel



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

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