

iSeries Trader Voice Solutions

iG114 Analogue 4-Wire Hoot Gateway

Benefits and Capabilities

- Speakerbus Real Time Protocol (SbRTP) Multicast Local Area Network (LAN) to 4-Wire Analogue UDP Unicast Wide Area Network (WAN) Protocol Conversion
- Access to Traditional Hoot 'n' Holler Services and External Audio Broadcasts
- Compatibility with Speakerbus' SB 534, Voice Conference Manager and 3rd Party Conference Bridges or Voice-Enabled Routers
- Comprehensive Set of Embedded Security Options
- 4 Remote Analogue Channel Bridges, Eliminating the Need for a Separate Conference Bridge
- Device Management via an Integral HTTP Server or Speakerbus' Browser-based Centralised Management System
- 2-Wire Voice Recorder Outputs

Overview

The iSeries is a suite of Voice over Internet Protocol (VoIP) applications that increase the resilience, flexibility and power of trading room voice solutions, through a "Plug and Trade" approach to trader voice technology. Based on dedicated network hardware and Speakerbus' Real Time Protocol (SbRTP) packet technology, the iSeries product family maintains traditional voice quality and scalability standards, while offering an evolutionary migration to a pure VoIP environment.

At the heart of the iSeries IP solutions suite is Speakerbus' enhanced SbRTP technology, which delivers exceptional voice quality across the Local Area Network (LAN). The iG114 converts 4-wire non-signalling Analogue circuits to Speakerbus SbRTP technology for transmission on the LAN or UDP Unicast for transmission across the WAN. SbRTP packet technology ensures that Hoot 'n' Holler calls reach the end user without the distracting latency between speakers.



iG114 Analogue 4-Wire Hoot Gateway

The iG114 gateway is a simple way to integrate the iSeries IP solution suite with traditional Hoot 'n' Holler solutions. Additionally, iG114 integrates with Speakerbus' SB 534 Intercom System and the Speakerbus Voice Conference Manager plus 3rd party solutions such as trading turrets, conference bridges, Analogue voice recorders and voice-enabled routers that support 4-wire interfaces and external audio broadcast devices. The iG114 is built on standards-based packet formats, utilising interfaces such as Simple Network Management Protocol (SNMP) and enabling integration into 3rd party network monitoring solutions

The iG114 is configured via an intuitive web-based interface or Speakerbus' Centralised Management System.

Channel Capacity

- 4 x 600 Ohm 4 wire Analogue channels (non-signalling)

Call Types

- Hoot 'n' Holler conferences

Protocol conversion of SbRTP LAN to :

- UDP Unicast WAN
- 4 - wire 600 OHM

Mixing Capacity

- 8 x Gateways and 4 x talkers per local LAN conference stream
- 4 x Remote WAN conference streams¹
- 4 x Analogue ports

Conferences Modes

- 1 x Conference connected to 5 x separate sites (Mesh or Hub)¹
- 2 x Conference connected to 3 x separate sites (Mesh or Hub)¹
- 4 x Conference connected between 2 x sites¹

Feature Keys

- eGateway functionality (for UDP unicast WAN requirements)

Network Requirements

- Network 100 Base-Tx (full duplex)
- IP addressing: Dynamic or Static
- Voice LAN: Multicast network utilizing IGMP and supporting SbRTP
- Voice WAN: Unicast network supporting UDP²
- Other supported network protocols: Ethernet, IPv4, DHCP, TCP/IP, DNS, HTTP and SNMP

VoIP Media

- Supported Codec types on the WAN: G.711 PCM 3.4KHZ A-law/U-law; G.729 Annex A – CS-ACELP; G.723.1 (6Kbps) MPC-MLQ (6KB)
- Speakerbus Trader Voice on LAN: Speakerbus Real Time Protocol (SbRTP) enhanced– 7KHZ voice bandwidth
- Typical latency over LAN 6ms (using 1ms packet sizes)
- Max Packet Loss on the LAN 5%
- Bandwidth optimisation techniques: VAD (Voice Activity Detection)
- Diffserv (RFC 2474) –Type of service field configurable

System Management

- Optional browser-based centralised management application for large scale deployments
- Individual device management via integral HTTP server
- Browser support either IE 6.0 or higher and Mozilla Firefox 3.0 or higher
- SNMP traps supported: coldstart, linkdown, linkup & authentication failure
- Upgradable operating firmware

Security Features

- Separate account profiles, independently password protected
- Encrypted passwords
- Ability to lock down individual device services including integral HTTP server and SNMP ports
- Configurable community string password
- Password protected Engineering communications port
- Administrator defined HTTP inactivity timeout

Status Indicators

- Independent channel activity indicators
- Heart beat indicator

Dimensions

- Housing: Aluminium enclosure
- Width: 186mm
- Height: 42mm
- Depth: 180mm
- Weight: 0.6Kg

Power Requirements

- Voltage 100–240VAC nominal
- Frequency 50–60Hz AC
- DC Output 12 v 750mA

Interfaces

- Voice connections 4 x RJ12 sockets
- Network interface 10/100 BaseT Ethernet auto sensing
- LAN connection RJ45 Socket
- 8 Pin Mini Din Com Port (reserved for use by Speakerbus)
- 2.5mm DC outlet socket

Environmental

- Operating temperature 0–35 C
- Relative humidity 10% to 90%, non condensing

1. Must be used in conjunction with the eGateway feature key

2. When utilising eGateway functionality

