

iG124 IP Hoot & Private Wire Gateway

Benefits and Capabilities

- Speakerbus Real Time Protocol (SbRTP) Multicast Local Area Network to UDP Unicast Wide Area Network Protocol Conversion
- Multiple Conference Modes and Onboard Mixing
- Additional Functionality Can Easily be Added Using Feature Keys
- Comprehensive Set of Embedded Security Options
- Device Management via an Integral HTTP Server or Speakerbus' Browser-based Centralised Management System



iG124 IP Hoot & Private Wire Gateway

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 was developed to deliver exceptional voice quality across the Local Area Network (LAN).

The iG124 gateway converts Speakerbus SbRTP technology to UDP Unicast for transmission across the WAN. The iG124 uses standards-based codec techniques G.711, G.729a and G.723.1 to transport IP Hoot 'n' Holler voice conferences or Private/Direct MRD/ARD voice calls across the WAN. The iG124 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 iG124 is configured via an intuitive web-based interface or Speakerbus' Centralised Management System.



Channel Capacity

- 4 x Hoot and/or Private/Direct Line MRD/ARD voice channels

Call Types

- IP Hoot 'n' Holler conferences
- Private/Direct MRD/ARD voice calls

Protocol Conversion of SbRTP LAN to:

- UDP Unicast WAN

Mixing Capability

- 8 x Gateways and 4 x talkers per local LAN conference stream
- 4 x Remote WAN conference streams

Conference 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 Conferences 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
- DNS support: Microsoft dynamic name system
- Voice LAN: Multicast network utilisation IGMP and supporting Speakerbus Real Time Protocol (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 and authentication failure
- Upgradeable 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 SNMP community string password
- Password protected engineering communications port
- Administrator defined HTTP inactivity timeout

Status indicators

- LAN and WAN status indicators

Dimensions

- Housing: Aluminium enclosure
- Width: 114.5 mm
- Height: 35 mm
- Depth: 238 mm
- Weight: 0.6Kg

Power Requirements

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

Interfaces

- 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

