iGate

An analog radio to IP systems convertor

iGate is an analog radio to IP systems convertor. The converter is compatible with a conventional radio, a tactical radio, or an ATC radio. It can operate in a variety of modes and has full-features software and functions. Both the hardware and software are designed for continuous operation (24/7) and can be interfaced with any radio manufacturer. The VoIP of the converter is based on the EURECAE ED-137 protocol, which ensures extremely low audio latency and robustness.

Features

- Operation modes: 4W E&M to IP/ IP to 4W E&M/ Repeater mode
- VoIP fully complies with the EUROCAE ED-137
- EUROCAE SNMP radio control command for ATC radio
- RS232 radio control command for conventional radio
- Radio control functions: Frequency /RF power /Squelch level /Modulation level
- 8 Radio connectors
- A 15-day internal voice recorder
- Radio inactive to active activation
- Internal precise RTC with satellite synchronization
- NTP Server or client mode
- Capable of ED-137 Best Signal Selection
- Test tone over VoIP
- Built-in VPN client
- Built-in speaker and volume control
- Programmable PTT, COR signal logic, and direction
- Float Rx squelch signal for HF radio interface
- Embedded web application for monitoring and configuration
- RCMS Host interface via SNMPv3
- Supported CODEC G.711 and G.729
- Dual Gigabit Ethernet connection
- Dual USB2 connection
- Nvidia Jetson Nano AI hardware platform
- Linux-based operating systems
- Compatible with R&S 4200, PAE T6 series 2-3, ICOM Transceiver, and other
- Dual power supply

Specifications

VoIP Standard	EUROCAE ED-137
VoIP Connection	16 URIs
Radio Control Protocol	EUROCAE SNMP, RS232
Audio CODEC	G.711m G,729
Internal Storage	32 GB
Local Display	OLED graphic display
Balance Radio I/O Interface	DB 15 Impedance 600 Ohm
Audio Output Level	-10 to 30 dBm
Audio Input Level	-10 to 30 dBm
Audio Frequency Response	100 - 5 kHz, +/- 1 dB
USB Connector	2 x USB
Ethernet Connection	2 x 1 GBE
Time Reference	Hardware Clock, NTP, Satellite
GNSS	GPS, GLONASS, GALILEO
RSSI ADC Resolution	12 Bit
VoIP Recorder	ED 137C
DC Source Input	12 -30 VDC XLR female
AC Source Input	90 - 230 VAC
Power Consumption	25 Watts
Systems Cooling	Passive
Mechanical Dimension	1 HU Racks