

Ultra RadioBridge

Integrates single channel radio voice & data and telephony onto an IP network



Features & Benefits

- Excellent SWaP for Vehicular, Shipborne & Airborne installation
- Radio-agnostic communications
- Flexible & customizable user interface
- Local & remote radio control
- Scalable system
- Data transmission & reception
- Automated call routing
- Embedded conference bridge
- Configurable voice & IP packet detect VOX transmit control modes
- SIP and H.323 support
- Java console operator application
- DSCP tagging of SIP and IP/UDP/SIP packets
- G.711 and G.729 codec support
- MELPe support

The RadioBridge provides next-generation radio and intercom communications capabilities in a single compact, lightweight and low-power unit suitable for vehicles, ships and airborne systems.

It integrates mobile radios, SATCOM/TETRA/GSM terminals, IP & analog telephone systems, user head-sets and networked communication terminals.

The system supports multiple simultaneous radio repeater, cross-patch, conference and intercom network connections. It reduces bandwidth demand by mixing many audio streams into one; this combined audio can be sent in a IP/UDP/RTP unicast or multicast stream to other RadioBridge units.

An optional plug-in card supports quad FXO lines, quad FXS telephone lines and a single Primary Rate ISDN T1/E1 span.

Supports 128 VoIP Terminal Devices

Depending on the installed DSP capacity, the system's embedded H.323 or SIP Gateway can support up to 128 VoIP terminal

devices, such as IP telephones, PC softphones on laptops and operator consoles. Dual 10/100 Base-T Ethernet LAN connections are provided for VoIP communications.

Radio controller

The system's analog radio/audio ports feature transformer isolated 4-wire audio, carrier operated relay (COR) inputs and relay operated push-to-talk transmit control.

Remote radio configuration & data communications

The solution may also be equipped to remotely configure radio base stations from a PC operator console GUI, including frequency, squelch disable, vehicle ID capture and more.

The solution's radio configuration messaging protocols are programmable for compatibility to all radios with RS-232, RS-422/RS-485 or Ethernet radio interface ports. It may also transmit and receive data between these ports and IP networked operator terminals.

System software

The call manager software networks multiple system nodes, allowing operators to access all connected radios or to log in via any LAN-connected VoIP terminal.

Console Operator Application

The console operator application allows operators to communicate via voice over IP with multiple radios and telephones and to set up radio patches and intercom networks. The console operator application runs on any laptop, computer or workstation supporting standard JAVA scripts.





Specifications

RB Models	RB40	RB80	RB400	RB800
Radion Ports	4	8	4	8
Radio Connectors	D-38999	D-38999	D-38999	D-38999
Radio Data Interfaces	RS232/422/485	RS232/422/485	RS232/422/485	RS232/422/485
Options	FXO, FXS, ISDN E1/TI, E&M	FXO, FXS, ISDN E1/TI, E&M	FXO, FXS, ISDN E1/TI, E&M	FXO, FXS, ISDN E1/TI, E&M, DNVT
Size (HxWxD)	43.2 x 171 x 260 mm Rackmount Version (1U) Available (RB40-R)	89 x 155 x 260 mm Rackmount Version (1U) Available (RB80-R)	45.7 x 175 x 247 mm	76 x 172 x 273 mm
Weight	1 kg (2.2lbs)	1.1 kg (2.4lbs)	1.7 kg (3.7 lbs)	3.1 kg (7.0 lbs)
Power	9-36 VDC	9-36 VDC	9-36 VDC	6-36 VDC
Ruggedness	Industrial	Industrial	MIL-STD-810G	MIL-STD-810G
Operating Temperature	-40 to + 60°C	-40 to + 60°C	-40 to + 70°C	-40 to + 70°C



making a difference