

 RADIUS

RADIUS 1U Rackmount RPU *Rackmount Radio Gateway*

The SyTech RADIUS 1U Rackmount Radio Gateway enables operators to connect and crossband all types of two-radio and radio systems. The RADIUS 1U connects to all makes and models of HF/VHF/UHF/700/800 MHz for unsurpassed radio interoperability. The RADIUS 1U enables operators to combine radios, computers, smartphones, and other devices within an all-in-one graphical user interface that's powerful yet easy to use.



GATEWAY:

Interconnect all types of two-way radios, including HF, VHF, UHF, 700/800 MHz, including conventional and trunking radio systems.



CLIENT:

Create dynamic radio patches or create channels for dispatch-like functionality from a Windows PC.



NETWORK:

Connect multiple RADIUS gateways across an IP network for a federated, multisite system of systems for long-distance communications.



RADIO CONTROL:

Remotely control popular radio models with interfaces for RS-232, RS-485, USB, CANBUS, and IP.



ADVANCED FEATURES:

Options for Recording/Playback, SIP Telephone Calling, Smartphone Connectivity, and more.



INTEROPERABILITY:

Interoperable with WAVE, ICE, and Vocality gateways with RADIUS VoIP RTP Interfaces.



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1U Rackmount RPU

The RADIUS 1U is built upon the RADIUS System on Module (SoM) Radio Processing Unit (RPU). Each RPU features four radio interface ports, each with dual 1.4 GHz Quad Cortex-A53 TI AM 625 processors. Combine multiple RPUs to create RADIUS 1U configurations of eight, twelve, or sixteen radio interface ports.



The RADIUS 1U Rackmount Gateway (DS)



- Dimensions: W 44.8 cm (17.6"), H 4.4 cm (1.7"), D 30 cm (11.8")
- Weight: 1.6 kg (3.5 lbs)
- Power: 50W nominal, 200W peak
- Input: 115 - 220AC
- Customizable Radio Interface Capacity: 4, 8, 12, or 16 Radio Interfaces
- Ethernet: 10/100/1000 Mbps
- Embedded Linux Operating System
- Texas Instruments "System on Module" design
- Processors: Multiple 1.4 GHz Quad Cortex-A53 Sitara Processors
- Temperature Range: -20 C to +70 C Operational, -30 C to +80 C Stored (designed to)
- Interfaces include: Analog, USB, RS-232, RS-485, CAN bus & others
- Storage: 32 GB onboard with SD expansion slots



The RADIUS Client Application

- Create dynamic patches among all communication types
- Create Channels for simplified end user access
- Mixed audio for simultaneous audio reception
- Create User Profiles for advanced enterprise management
- Provide permission-based capability to User Groups
- Communicate among multiple RADIUS gateways with federated RADIUS MultiSite Capability
- Operational on Windows 10 and other Windows platforms
- On-screen radio control heads for remote radio control



RADIUS Client – with Motorola APX Virtual Control Heads

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