

ACU-Z1™

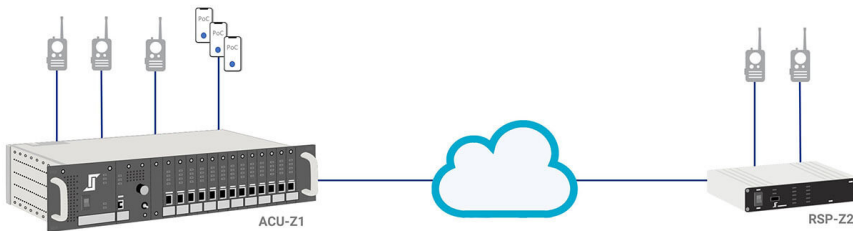
MODULAR INTEROPERABILITY GATEWAY



OVERVIEW

The ACU-Z1 combines modern technology with JPS' two decades of experience as the industry leader in communications interoperability. Modular, 2U high, fully IP centric, and loaded with the capable radio interface features you have come to expect from JPS, the ACU-Z1 can interface just about every type of voice communication system.

The modern user interface, along with the convenient local handset, twelve plug-in modules for local connections, and up to 24 virtual IP-based resources make it easy for an operator to create and disband communication nets, monitor resources, record nets, and perform light dispatch operations.



DISPATCH + MONITOR

The ACU-Z1's intuitive browser-based GUI allows an operator to expand or minimize the dispatch and monitor areas. Operators can employ these dedicated zones to create mini-dispatch stations for on-the-fly one-way or two-way communications. Since any configured resource can be designated as the dispatcher by the operator, the system provides a high level of flexibility.

Separate from dispatch, monitor nets provide another unique feature. Any resource configured on the system can be designated a monitor and can listen to audio from any number of other resources on the system.

NETWORK CENTRIC

The ACU-Z1's network-focused design allows straightforward integration of other JPS gateways, such as the RSP-Z2, the NXU-2B, or even other ACU-Z1s. Creating these wide area systems does not tie up any modules on the controlling ACU-Z1, with all input from these communications devices coming in via IP to the CPM module.

Whether connected devices are IP-based or locally configured, the ACU-Z1 manages them efficiently. Radio/IP passthroughs and simplified external recorder configuration provide additional options.

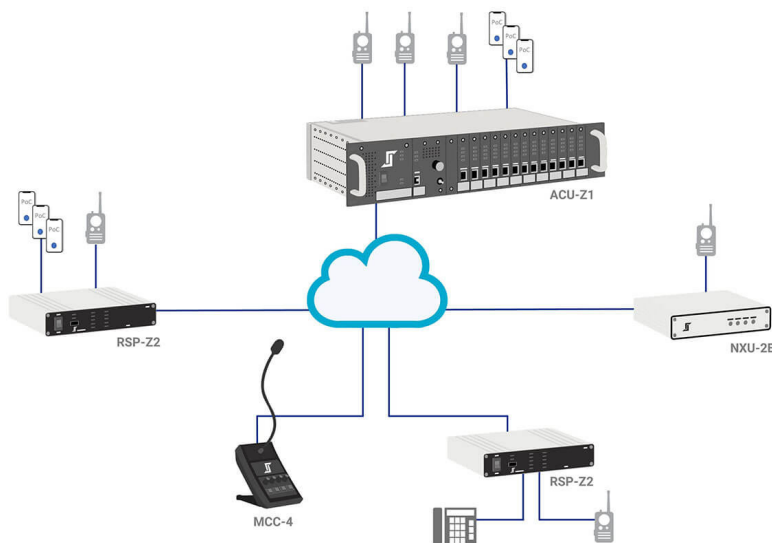
KEY BENEFITS

- + Requires less power than legacy ACUs and no additional rack space for ventilation
- + User-configurable VIM module for radio/4-wire device or IP resource types
- + Browser-based control and configuration
- + PSTN module for telephony connectivity
- + Connect up to 12 local resources using configurable modules
- + Connect up to 24 remote resources using virtual streams
- + User selectable VoIP protocols: SIP, RTP, or JPS RoIP
- + Push-to-Talk over Cellular (PoC) interface connections
- + Encryption optionally available for JPS RoIP and Bridge audio
- + Monitor/dispatch with specified USB wired/wireless headsets or included handset

APPLICATIONS

When the situation is critical, your team needs seamless interoperability. The ACU-Z1 provides a true IP-centric gateway to digitally converge existing radio systems with each other as well as with landline and SIP telephones, smartphones, and other devices.

An ACU-Z1 can function as the controller for a wide-area system that includes the devices connected locally at the unit as well as multiple remote devices. Devices that are not natively IP can be brought in through other ACU-Z1 gateways, the dual-channel RSP-Z2, or NXU devices. Interoperability Nets involving these resources are created using the highly scalable web-based GUI on the controlling ACU-Z1.



Here, three radio systems and one PoC talkgroup are configured locally on VIM-Z1 modules. Additionally, JPS Bridge and JPS RoIP connections are used to bring audio via IP from remote communications systems interfaced to the RSP-Z2s and the NXU-2B, and from an MCC-4 Console. All resource audio is managed using the ACU-Z1 user interface.

SPECIFICATIONS

Size and Weight

3.5" H x 19" W x 10" D ; Approx. 11 lbs

Audio Vcoders

GSM (13 Kbps), PCMU/G.711 μ Law (64Kbps), PCMA/G.711 aLaw (64Kbps)(64Kbps)

Input Power

115 or 230 VAC +/- 15%, 47-63 Hz, 60 VA typical, 90 VA max.; +11 to +15 VDC @ 4A, nom. 7A max

Impedance

VIM-Z1 Input: Balanced /Unbalanced 600 Ω , Unbalanced 47k Ω

VIM-Z1 Output: Unbalanced 600 Ω

PSTN-Z1 Input: 600 Ω Nominal / Output: 600 Ω Nominal

