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Compunetix 4-STAR

IP to Analog Radio Gateway for the Compunetix MVP

The need to integrate existing analog radios to modern IP communication systems has never been greater. Compunetix' powerful and versatile SIP/IP To Analog Router (4-STAR) provides an efficient and compact IP gateway for connecting traditional radios to the Compunetix Mission Voice Platform (MVP). For such radio interfaces, the 4-STAR is a simple and cost-effective alternative to specialized third-party equipment such as channel banks and terminal servers.

In addition to working in conjunction with the Compunetix MVP, the 4-STAR can also be used in stand-alone mode to transport analog communications over an IP network.
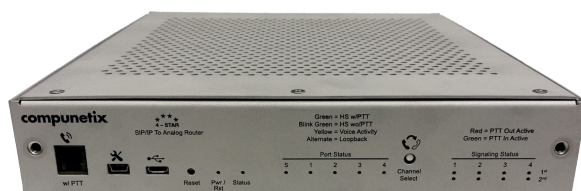
What is the 4-STAR?

The 4-STAR is a small rugged box with four analog radio ports and a redundant IP network interface. Each radio port includes a standard 4-wire full-duplex audio interface for connection to virtually any radio. Each port also includes an RS232/422 serial port and discrete input/output for enhanced radio control (e.g. frequency, mode, squelch, power) as supported by the MVP software.

Audio and control data are transported to/from the MVP central switch over an encrypted redundant IP link. Each 4-STAR is fully managed by the MVP with health and status available on the MVP Maintenance Client.

IP to Analog Radio

Radio Control

Analog to Analog IP Gateway

Analog Audio to IP

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Related Products

MVP
CDI-22
TDI-13
SDI-7
TRI-6
HAI-8

Some of Our Customers

AT&T
British Telecom
Boeing
NASA
NBC Universal
Italian Space Agency
National Oceanic and Atmospheric Administration (NOAA)
Fallon Naval Air Station ("Top Gun")
U.S. Air Force
Northrop Grumman
Lockheed Martin

Analog Interface

Input: 10Ω, 600Ω, or 10kΩ
Output: 600Ω
E&M (relays)
Another set of relays
Serial RS232/422 for radio control
Radio squelch detection
4 extra I/O pins (12V or 3.3V)

Hardware

Desktop or rack mount
No fans or moving parts
All locking connectors
Full LED status indication
Industrial grade temperature range
12V input power jack
Two Ethernet interfaces
Handset interface for remote use
USB interface for full redundancy
Low power consumption

4-STAR Features

For radio support, the 4-STAR utilizes both Radio over IP (RoIP) and Voice over IP (VoIP) protocols. E&M signaling on each port supports Push-to-talk (PTT) keying. The 4-STAR supports squelch detection and radio control features such as setting the frequency, squelch level, and mode for popular radio types (managed from the MVP). By plugging a handset into the 4-STAR, a technician can test radios locally as well as communicate with MVP console operators via a maintenance channel.

The 4-STAR provides relays and additional input/output pins for functions such as triggering door locks, lighting indicators, and issuing alarms. Input interfaces can also read signals or conditions from remote locations.

The 4-STAR connects radios to the MVP by means of a single or redundant network connection. For all network connections, the IP transport is encrypted by default. The devices and networks can be configured through a secure network connection or through the MVP Maintenance Client.

Because it was developed using solid engineering practices, the latest industry standards, and the most advanced technologies, the 4-STAR provides high reliability and the lowest possible latency for radio interfaces in remote areas.

- **SIP/RoIP interface, ED-137 compliant**
- **AES encryption on Ethernet communications (optional)**
- **Remote firmware upgradable**
- **Audio compression options**

- **Diagnostics, remote testing, integrated health monitoring from MVP, PTT feedback from radio**
- **Redundancy support with two Ethernet interfaces or full redundancy with two 4-STAR's**

MVP - Reliability, Flexibility, Security

The Compunetix MVP (Mission Voice Platform) is a purpose-built, mission-critical communications system specifically designed for high reliability applications. It provides operators in a control room environment with integrated access to vital communication assets such as radios, phones, hotlines, and internal conferences. The unique non-server-based architecture provides extremely low latency and high security. The MVP's scalable architecture and native T1/IP interface enable it to grow and adapt to meet your present and future communication needs.

MVP Direct IP to Analog Radio

Use your MVP and the 4-STAR to implement direct encrypted IP all the way out to an analog radio.