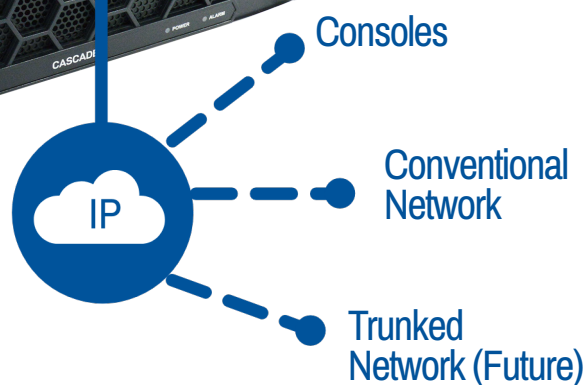




 **CASCADE**[™] REPEATER



**The perfect choice for affordable and scalable
conventional public safety radio systems.**



Solution Summary

Cascade™ is a software-defined repeater that has been engineered for IP-networked radio solutions with coverage, dependability, and easy management in mind. Cascade has built-in diagnostics, alarms and logging capability; and allows for system parameters to be monitored, configured and upgraded remotely over IP. Cascade features unique specifications, unrivaled performance and legendary reliability to public safety LMR. With P25 CAI, analog and mixed mode capabilities standard; Cascade is the perfect choice for affordable and scalable, conventional public safety radio systems.



Core Product Features

Network Application

A networked product ideal for conventional voting and simulcast applications of any size. Native IP interface supports P25 Digital Fixed Station Interface (DFSI) protocol.

Linearized Operation

Hardware ready for Linear Simulcast Modulation (LSM) and future support of PH II Trunking.

Space Efficient

Dual 100W repeaters with IP interface and power supplies in a single 4RU rack footprint.

Open Standards

Cascade continues our tradition of full compliance to industry standards such as, APCO P25 and various TIA published standards, allowing for interoperability with other compliant third party products.

Feature Rich Software

A simple, easy-to-use browser-based interface provides access to remote functions such as, configuration, diagnostics and alarming. Features also include on-board logging, automated failure mitigation and testing/calibration.



Cascade LMR Repeater

The front cover consists of three variable-power thermostat-controlled cooling fans. Under the cover, our modular design makes each component of the repeater self-contained so it's easy to troubleshoot and maintain your communications platform.

Each module slides into the 19-inch, 4RU (rack unit) sub-rack and is secured in place with captive fasteners. This all-inclusive package features up to two analog / P25 repeaters with variable 10-100W linear amplifiers, network interface and an integrated power supply.

Hardware Performance

Cascade is engineered to deliver the same exceptional performance that stays loyal to our heritage of reliability, dependability, and longevity. Cascade's linear amplifiers support LSM for additional site flexibility and enhanced coverage for voted simulcast networks. We know that for you to Be Heard that our hardware needs to perform without concern.

Software Innovation

The software at the heart of Cascade has been developed by analyzing and addressing the fundamental challenges faced by today's public safety communications customers. Taking advantage of IP-networking and the P25 Standard, Cascade can be upgraded with new features and capabilities without needing a visit to the radio shop.

Industry Compliant

Zetron's commitment to open standards and vendor neutrality is maintained with full support of P25 CAI and IP protocols, allowing for interoperability with other Zetron and third party equipment. Cascade meets the requirements from FCC (Federal Communications Commission), TIA (Telecommunications Industry Association) and IC (Industry Canada). Additionally, Cascade is 100% RoHS compliant



Remote Programming & Monitoring

Cascade provides browser-based monitoring of equipment health and performance. Operators have the ability to remotely make system modifications or take critical action without visiting the site.

The screenshot displays the CASCADE web interface for Transceiver 1. The left sidebar contains configuration options for the transceiver, including IP Address (127.0.0.1), Unit ID (hex) (5000001), Mode (Local Repeat), and Default Active Channel (1). The main content area shows a Channel List table with 16 channels. The bottom navigation bar includes options like Channel List, Radio Channel, Automatic Station Identification, Alarms: Disabled, Status, Import/Export Configuration, and Configuration Report. The bottom right corner has buttons for Discard Changes and Save Changes.

Channel No	Channel Name	Rx Frequency	Tx Frequency	Type
1	Channel 1	162.30000	153.21250	P25Digital
2	Channel 2	162.40000	162.00000	P25Digital
3	Channel 3	162.40000	162.00000	P25Digital
4	Channel 4	162.40000	162.00000	P25Digital
5	Channel 5	162.40000	162.00000	P25Digital
6	Channel 6	162.40000	162.00000	P25Digital
7	Channel 7	162.40000	162.00000	P25Digital
8	Channel 8	162.40000	162.00000	P25Digital
9	Channel 9	162.40000	162.00000	P25Digital
10	Channel 10	162.40000	162.00000	P25Digital
11	Channel 11	162.40000	162.00000	P25Digital
12	Channel 12	162.40000	162.00000	P25Digital
13	Channel 13	162.40000	162.00000	P25Digital
14	Channel 14	162.40000	162.00000	P25Digital
15	Channel 15	162.40000	162.00000	P25Digital
16	Channel 16	162.40000	162.00000	P25Digital

Support and Services

Cascade is supported by a warranty that includes comprehensive extended service and support. Our warranty is ideal for customers who prefer to rely on personalized attention from their providers and assistance in troubleshooting and maintaining their systems.

**Next generation IP-based features combined
with legendary reliability and performance.**



Why Zetron?

Zetron Services and Support

Zetron also offers a range of optional support services to ensure the system is installed and configured to run optimally, including: 24/7 telephone support, software maintenance, hardware replacement and repair, remote and on-site configuration assistance, system re-optimization, and technical and operational training. Many of these options are available as standalone services.

Performance You Can Count On

Zetron's reputation has been built on the quality, reliability, and robustness of its products. They are specifically designed to meet the needs of mission critical operations that must stay up and running 24/7. Zetron solutions are also known for their longevity. Not only do they continue to deliver rock solid performance over time, but they have the flexibility to keep pace with emerging technologies and changing operational requirements.

About Zetron

Zetron, a Codan Company, is a trusted provider of mission critical communications systems worldwide, it's ALL we do. With a comprehensive portfolio of technology solutions, including integrated next generation call taking, dispatch, CAD, mapping, fire station alerting, logging/reporting, Land Mobile Radio (LMR) communications and more, Zetron is relied on by customers in federal/state/local government, public safety, transportation, utilities, healthcare, and other markets on all seven continents of the world. Zetron's relentless pursuit of quality, durability and interoperability has made it one of the most enduring and consistently trusted brands in mission critical communications for decades. Our solutions are backed by world class technical support, training, project management and professional services, as well as a global network of highly capable partners and system integrators dedicated to exceeding the unique needs of Zetron customers. For more information, visit: www.zetron.com.



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The Power to Respond™

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