PATHWAY+ RADIO GATEWAY

MISSION CRITICAL ALLIANCE™

Expanding Radio Communications Range and Versatility While Holding Expenses Down

Zetron's Pathway+ radio gateway enhances the range and versatility of IP based P25 radio communications when transitioning to modern IP radio networks and enables legacy connections to adjacent systems through mutual aid channels. The Pathway+ functions as a communication bridge to IP networks. It allows for two-way messaging between donor radios and base stations as well as DFSI-connected consoles, regardless of the manufacturer or age of the equipment. This integrated versatility makes Pathway+ a powerful and fiscally responsible substitute for a full voice communication system overhaul of all interconnected systems.

AVOID DISRUPTIONS WHILE SCALING WITH TECHNOLOGY

Seamless P25 and Legacy Connections

L3Harris and Zetron have partnered to connect legacy radio systems to VIDA® P25 systems through the Pathway+ radio gateway. The trusted and resilient VIDA system from L3Harris paired with Pathway+ allows customers to transition from a legacy LMR network to a modern, feature rich P25 network as their time and budget allow.

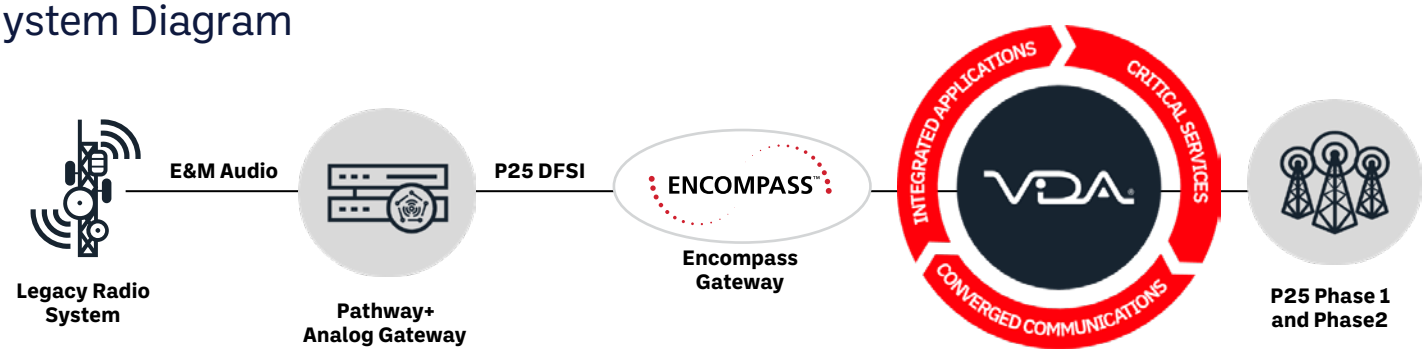
Pathway+ is a leading solution to help control costs and safeguards the continuity of operations as radio systems migrate to newer technologies.

L3HARRIS ZETRON

FACT SHEET

The Pathway+ Analog Gateway uses Zetron Pathway+ DFSI Gateway to provide voice connections for interoperability between P25 and legacy radio systems. The analog audio is converted to digital audio using a DFSI interface. The L3Harris Encompass Gateway Maps the DFSI talkpaths to VIDA talkpaths.

System Diagram



- Each Pathway+ Analog Gateway can connect up to two radios or base stations at the site, converting E&M audio to P25 DFSI.
- The Encompass Gateway is a licensed software module on the core, converting P25 DFSI to VIDA P25 talkgroups.

Specifications	
Physical Dimensions	1.25 x 7.5 x 10 inches (HxWxD)
Mounting	Two Pathway+ units in one RU 19" rack space with mounting

Power and Environmental Characteristics	
Input Voltage	+13.5Vdc (+10.5 to +16Vdc)
Max. Current	600mA at 10.5Vdc
Operating Temp.	5˚C to 55˚C (41˚-131˚F)

Radio Interface	
Number of Radios	Two interfaces per Pathway+
Type	User selectable between, Analog 4-Wire, V.24, and DFSI

Console Interface	
Number of Consoles	Up to four console systems
Type	Follows P25 DFSI Standard

Network Requirements	
Device Payload	1 Kbps idle, 130 Kbps active
Bandwidth Ratio	< 40% (< 30% mission critical). Bandwidth Ratio of IP bearer should be 2 to 3 times actual payload to ensure optimum voice quality
Packet Loss	< 5% (<0.1% mission critical)
Packet Delay	< 500 ms (< 40 ms mission critical)
Packet Jitter	< 1000 ms (< 20 ms mission critical)
Network Type	Two fully switched Ethernet, full-duplex, operating on separate sub-nets
LAN Speed	10/100 Mbps

The Mission Critical Alliance is a partner program for best-of-breed technology solution providers to openly collaborate to advance the capabilities, compatibility and security of mission critical solutions.

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