



4 WAN PORT SIPE

With the idea of all networks being transmitted via an IP interface, it's looking like serial communication devices won't be needed much longer. One Stop Solutions (1-SS) sees this as an opportunity to provide a low-cost solution that enables the use of serial devices without risking national security. Enormous amounts of monies have been spent to purchase serial communication devices so interoperability can be maintained between the US armed services and other agencies. The 4 WAN Port SIPE is a viable solution that will enable the use of serial products well into the future and provide a smooth transition into future communication systems.

Provides solutions for

- *Any Encryption Over IP*
- *Secure Point to Multipoint Wireless Systems*
- *Secure Transition to EoIP*



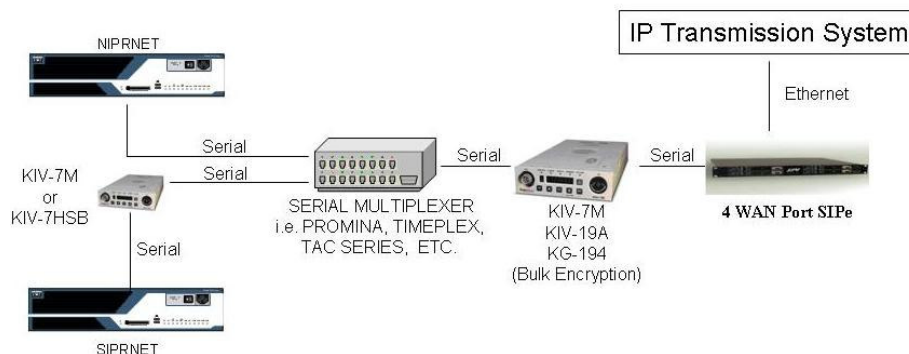
4 WAN Port SIPE

Converting Serial to Ethernet

Technology today is dictating how organizations are communicating. With the emergence of IP radios and IP satellite systems, interfacing serial multiplexers to these IP transmission systems have been an issue for organizations trying to maintain proper encryption. The SIPE takes care of both these issues.

Using Serial Encryptors

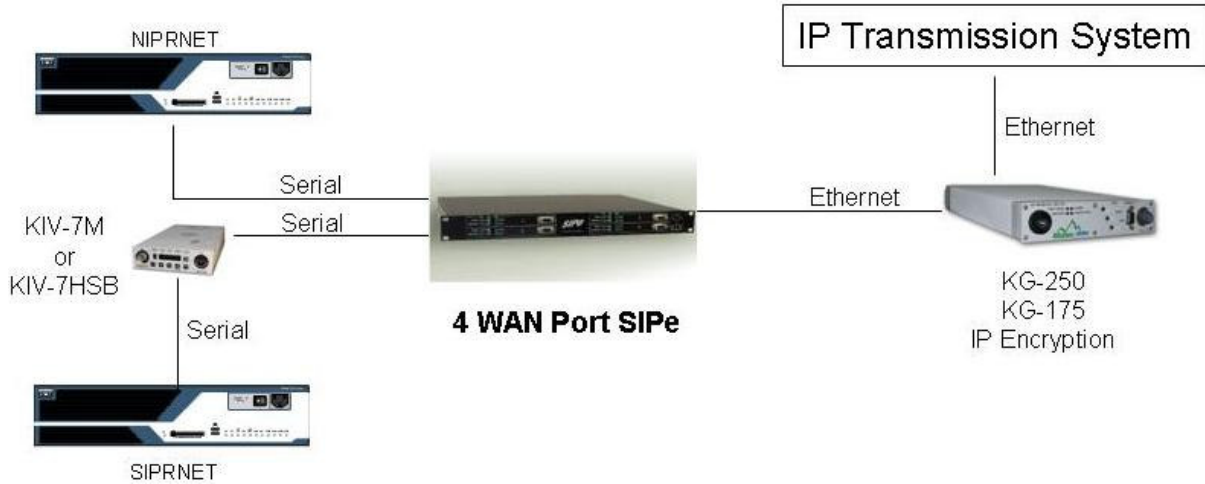
The SIPE has been used and tested since the summer of 2006. It works successfully with the KIV-19A and KIV-7M in various configurations that included WIMAX and IP satellite system equipment. The SIPE can maintain secure wireless communications to multiple sites using serial encryptors. The United States Marine Corps purchased the 4 WAN Port SIPE for their DTC program. The intent of the SIPE is to maintain interoperability between all the US armed forces. The SIPE can be used in networks up to the TS/SCI level when proper encryption is used.



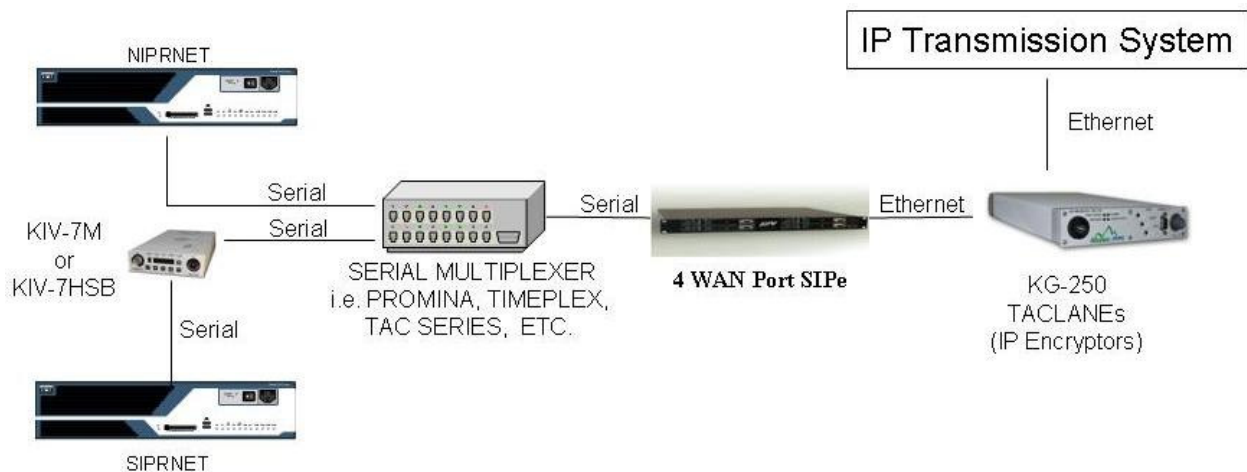
Using

Ethernet Encryptors

The SIPE can be used with serial and Ethernet encryptors. Ethernet encryption products like the KG-250 and TACLANES were developed to replace serial encryption devices. The Department of Defense has acquired devices like the Promina and Timeplex systems to maintain interoperability between US services. These devices can still be used in their proper configuration with an easy transition for use with IP transmission systems. Here are some economical solutions that would work.



Replacing the serial multiplexer and/or convergence router with a SIPE



Use of serial multiplexer and SIPE to an Ethernet encryptor



Features of the SIPE

There are other serial to IP devices on the market, but none match One Stop Solutions SIPE. The 4 WAN Port SIPE is capable of working in a point to multipoint secure wireless configuration using four 10/100/1000 auto-negotiable WAN ports. When used in bridge mode, it's capable of transmitting data up to 8.192Mbps. It's also capable of being used in a routed or IP mode configuration. When used with an IP address, it can reach speeds up to 5Mbps.

If organizations have tactical IPv6 networks that need to reach back to strategic locations, the SIPE can make it happen. IPv6 networks simply traverse the IPv4 backbone network that the SIPE provides. IPv6 data is encapsulated into a IPv4 data packet and reassembled at the distant SIPE before being sent onto the distant IPv6 network. There is no special configuration needed to make this feature work.

Cost Savings

With the converting of serial data to Ethernet data, there comes a cost. Using proposed configurations, new IP encryption devices need to be purchased along with a convergence router to connect to that IP transmission system. The SIPE allows the use of current serial encryption devices which use the Electronic Key Management System (EKMS) that distributes COMSEC and TRANSEC keying material. This feature alone saves a unit several thousand dollars per upgrade.

About 1-SS

One Stop Solutions has over 70 years experience in designing, implementing and maintaining joint networks. If you have questions about transmission systems, encryption devices, convergence of networks or any other network issues, contact us at (732) 483-4350 and we'll be glad to assist.

“One Stop – Problem Solved”



4 WAN PORT SIPE

Network Port (WAN)

Interface: 10/100/1000 Base-T, Half/Full Duplex, Auto-Negotiate
Connector: 4 RJ45 ports for direct connection to WAN transport device

Serial Port

Speeds: Programmable, 3Kbps to 8192 Kbps
Interface: RS232, RS530, RS-530A, RS449, V.35, X.21
Connector: 4 DB25 Female (DCE)
Clock Source: Internal, External, Remote

User Ethernet Port

Interface: 10 Base-T, Half/Full Duplex
Connector: RJ45

Console Port (Front Panel)

Interface: RS232 / V.24
Baud Rate: 9600 to 115.2K
Connector: 4 DB9 Female (DCE)

Power

Input Voltage: 8 to 28 Volts DC
110 to 220 VAC (external supply)
Consumption: 13.2 Watts

Environment

Operating Temperature: 0° to 55° C
32° to 130° F
Humidity: Up to 90% non-condensing

Dimensions

Size: 19"W x 14"D x 1.75"H
48.26 x 35.36 x .445 cm
Weight: 11.5 lbs.
5.216Kg