

# Skymira 4-Wire IP Relay

*Reliable Push-to-Talk Coverage. Anywhere. Anytime.*



The Skymira 4-Wire IP Relay (4Wire-IPR) is a highly secure radio over IP (RoIP) gateway that extends land mobile radio coverage over satellite, cellular, and private networks. With automatic network switching, it ensures critical communications go through every time – regardless of where you are. The 4Wire-IPR is designed to solve communication challenges faced by those who rely on push-to-talk communications in public safety, utilities, fire, first response, and other mission-critical sectors.

The 4Wire-IPR is vendor- and network-agnostic so it works with any radios and operates on any IP network. Seamlessly integrated into new or existing two-way radio systems, the 4W-IPR eliminates coverage gaps, enables advanced interoperability and cross-banding, and provides rapid deployability. This increases worker safety, improves operational efficiency, and ensures reliable communications when they matter most.

## Key Features

- Highly Secure — FIPS 140-2 level 1 validated
- Rugged Construction — deployable in harsh environments
- Manufacturer Agnostic — compatible with encrypted or unencrypted radios from any manufacturer across any radio standard including analog, P25, DMR, NXDN
- Network Agnostic — satellite, cellular, wired
- Multi-Network Capable — network redundancy & automatic failover
- Very Low Bandwidth — optimized for satellite
- Real-time GPS tracking — including Tier 2 location for P25 radios
- PTT via control head and speaker or via radio connector
- 12v DC input (battery power capable)
- Selectable RoIP crossbanding on local channel



## Benefits

- Get Reliable Coverage Everywhere
- Augment Existing Networks & Equipment
- Meet Strict Security Requirements
- Rapidly Deploy in Vehicles or GoKITS
- Comply with Standards & Regulations
- Ensure Network Redundancy & Failover
- Keep Comms Connected During Outages & Disasters

## Primary Users

- Law Enforcement & Public Safety
- Electric Co-ops, Utilities & Energy Providers
- Wildland Fire
- Emergency Response & Disaster Recovery
- Federal Government
- Military
- Oil and Gas
- Private Security & Events Operations

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Physical Details	
Power	10.8–16.3 VDC, 1.0 A
Operating Temp	-20°F-140°F (-30°C-60°C)
Height	2.41 in (61.2 mm)
Width	6.99 in (177.5 mm)
Depth	6.65 in (168.9 mm)
Weight	3.0 lbs (1.36 kg)

Ports	
1x	10/100/1000 Ethernet (RJ45)
1x	10/100 Ethernet (RJ45)
1x	Control Head (RJ45)
1x	4W E&M (RJ45) low
1x	RS232 Serial (DB9)
1x	Power Input/Speaker Out (DB15)

Specifications	
Control Head	Dash Mount or Handheld
4-Wire E&M Interface	COR supports active high and active low
Network	IPv4 and/or IPv6, 10 kbps minimum
GPS Drivers	Starlink, Peplink, Cobham BGAN-X/XL
Maximum Talkgroups	1500
Compatible Standards	Analog, P25, DMR, NXDN
Configurations	In-Vehicle, GoKIT, Rack-Mount, Fixed-Site

Security Specifications	
Transport Layer	DTLS 1.2 Datagram Transport Layer Security Mutual Server and Client Authentication
Encryption Algorithm	AES-256 GCM Advanced Encryption Standard with 256-bit key and Galois/Counter Mode
Signature Algorithm	ECDSA P-384 Elliptic-Curve Digital Signature Algorithm Specific NIST-defined elliptic curve (secp384r1)
Key Exchange	ECDHE P-384 Elliptic-Curve Diffie-Hellman Ephemeral Perfect forward secrecy
Data Integrity	SHA-384 Secure Hash Algorithm 2 (384 bit) Unique fingerprint to verify authenticity
Compliance	FIPS 140-2 Level 1 validated, certificate #4282 Design, implementation, and operational assurance Protection of sensitive unclassified information