

Applications:

- Gigabit Ethernet Fiber to the Home
- Ring-based E-FTTH
- Chain-based E-FTTH
- Success-based FTTH Deployments

Key Highlights:

- Self-Managing Ethernet based E-FTTH Gateway
- Auto Configures with all Ethernet Switches and Routers
- Self-Healing gigabit Ethernet RHINORing using a single fiber
- 2 VoIP ports on RJ-11
- 4 Ethernet Service Ports full line rate (500Mbps)
- HPNA 3 service port on coax connection
- 8 Hour battery back-up option
- Status Indicator LEDs
- Remote management of RHINO, in-house HPNA and UPS Batteries



The RHINO OSG (Optical Services Gateway) provides scalable Gigabit Ethernet FTTH terminations for IP triple-play services. Gigabit Ethernet transport ensures bandwidth will be available now for demanding Video, Data and Voice services.

Flexible FTTP Configurations - The RHINORing™

The RHINO OSG provides extraordinary flexibility for E-FTTH deployments in Point-to-Point, Chain and Ring configurations. The RHINORing supports over 32 OSG units on a single Gigabit Ethernet fiber link.

Industry's Lowest FTTP Deployment Costs

- RHINO OSG is optimized for success-based Triple-play services delivery
- Hardened outdoor version and indoor version with mounting options
- Multiple network topologies - Direct, Chain and Ring
- Cost Effective VoIP, Ethernet Data and HPNA implementations
- Lower optical transceiver costs - RHINO supports the complete distance range of single mode and multi-mode ReadyLinks SFP Laser packs

Open Standards Based

The RHINO OSG is compatible with all major Ethernet Switch and Router Vendors. The OSG is truly a plug and play Ethernet termination solution.

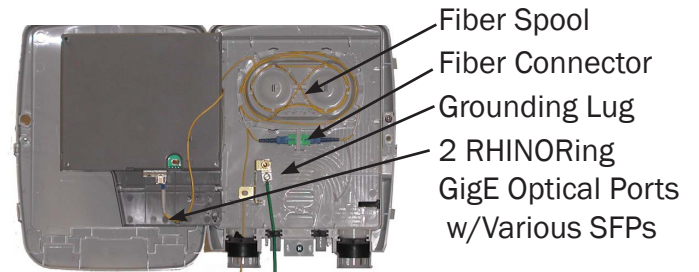
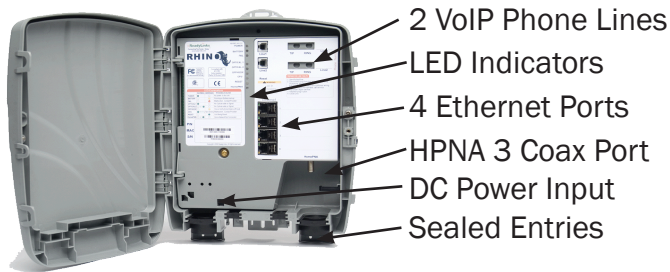
Rapid One Step Provisioning, Multiple Management Options

- Remote management of HPNA home network reduces truck rolls
- Auto provisioning via DHCP and active scripts
- Command Line Interface (CLI) with standard commands
- ReadyLinks BONUS Graphical User Interface

Integrated HPNA 3 for Easy Home Networking

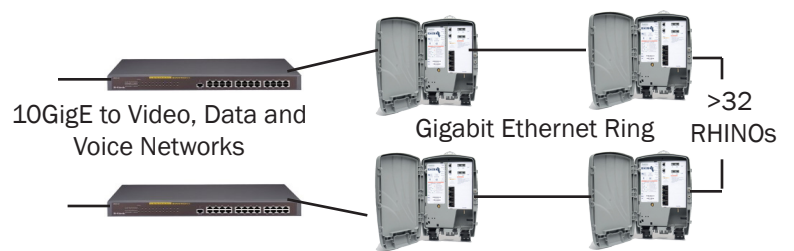
Use existing home coax wiring to deliver IPTV and High-Speed Internet to reduce residential installation costs. The RHINO has optional HPNA 3 built-in to interface with HPNA devices in the home.

RHINO OSG Interfaces



RHINORing Example:

Multiple RHINO OSGs can be ringed together to create a Gigabit Ethernet-based FTTH ring. This ring is self-healing and can withstand either fiber disconnection or OSG power-down.



Specifications	
Environmental Specifications	
Operating Temperature	- 40 to 85° C
Input Voltage, Power Consumption	12 VDC, 8 Hour optional battery backup, 9 Watts
Humidity	95% non-condensing
Certifications	UL, CE, FCC Part 15 Class B
WAN and Service Ports	
WAN Connectivity	2 SFP sockets supporting 1Gbps symmetrical Ethernet Ring Works with dual or single fiber, single mode or multi-mode, short, medium or long reach SFPs
Ethernet Service Ports	Four (4) 10/100BaseTX Ethernet full duplex RJ-45 full line rate 500 Mbps
Voice Service Ports	Two (2) RJ-11 analog voice connectors, Life-line support through 8-hour battery backup. GR-909
VoIP Protocols and Voice	SIP (RFC 3261) and MGCP, G.711 (u-law, A-law), G.722, G.723, G.726-32 G.729 Codecs, Fax T.38
Video	Video Prioritization
HPNA 3 Coax	One (1) Optional HPNA 3 Coax connection
Quality of Service	802.1Q VLAN, 802.1p, (Voice, Video, Data and Management have their own priorities) QinQ tagging, up to 200 VLANs, Per port egress rate shaping and ingress rate limiting and policing
Standards Compliance	IEEE802.3, IEEE802.3U, IEEE802.x, IEEE802.1D IEEE802.1Q VLAN ID, RoHS, GR-49
Mechanical Specifications	
Dimensions, Weight	12"(L) x 9.75"(W) x 3.5"(H), 350mm x 245mm x 80mm, 4 lbs

Note: specifications are subject to change. v2.2