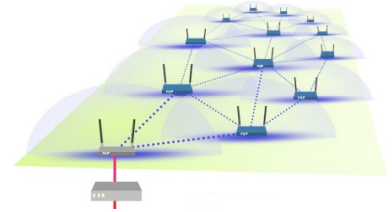


RapidLink™ 100

Indestructible Instant Networks



Concentris is a leading innovator of network solutions based on ad hoc mobile mesh networking technology. With our Rapidlink 100 family of mesh routers, users rapidly deploy secure, reliable, and scalable data networks for use in field offices, emergency or temporary venues, sensor networks, secure perimeter systems, and many other applications.

Concentris Rapidlink 100 networks are deployed faster, cheaper, and easier than any conventional wireless technologies. So quick to deploy and so resilient, RapidLink networks are indestructible instant networks.

Concentris Indestructible Instant Networks are:

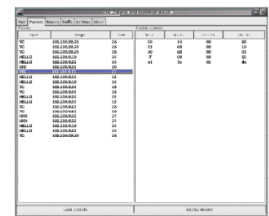
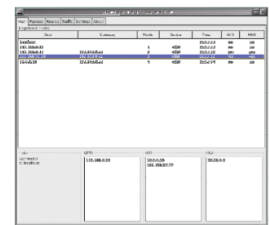


- **Easy to deploy and manage** - Rapidlink routers eliminate the need to string data cable. As the routers are placed throughout a coverage area, they automatically discover their neighbors and create a multi-path redundant mesh wireless network.
- **Quick to deploy** - By eliminating the need for data cabling found in conventional wireless networks, Rapidlink networks are deployed in minutes, rather than hours. Ideal for temporary or emergency applications.
- **Lower cost deployments** - The great reduction in labor and wiring enables Rapidlink to significantly reduce the cost to deploy large wireless networks.
- **Easy to expand and scale** - The capacity/coverage area of the wireless network can be expanded simply by adding additional Rapidlink routers to the coverage area.
- **Secure and dependable** - Rapidlink utilizes AES-based encryption tunnels to protect the data and network from unauthorized disruption and eavesdropping.
- **Reliable and resilient** - Rapidlink networks automatically detect faults and reroute data traffic to self-heal the network. This resilience makes the network immune to conventional single-point failures.

Concentris RapidLink networks produce a secure information grid over any location, whether remote or urban, public or private venue, facility or transit system. Users can instantly, intelligently, and securely share information including voice, data and video over this highly reliable, redundant wireless network.

RapidLink implements the proactive OLSR (Optimized Link State Routing) protocol standard (IETF RFC 3626, Oct 2003). Use RapidLink in stand-alone configurations, or in combination with other OLSR technologies.

To effectively manage network traffic, RapidLink includes an efficient network visualization tool that optimizes network utilization, manages the network, and reports on the quality of the wireless connection.



Features and Benefits

Highly rugged and dependable RapidLink 100 routers from Concentris give truly wireless and secure communications that are instantly deployed—active and fully functioning as soon as the routers are placed.

- **Self-healing**—A network of RapidLink 100 routers automatically heals itself and maintains all connections in the event any node fails. If any connection fails, every router in the network automatically adjusts to make sure all sessions remain live.
- **Data Safe**—Concentris RapidLink networks can also work with multiple backhaul connections, ensuring redundancy.
- **Open/Non-proprietary**—Compliance with open standards-based non-proprietary routing protocols (OLSR) ensures interoperability and enables integration with other open systems.
- **Extendable**—Wireless peer-to-peer connections do not require Ethernet or other wired connections between access points or clients. Connect as many devices together as you like without a significant reduction in network performance or capacity. Wirelessly cover a building, a block or an entire city.
- **Small and Compact**—Can fit into most any area with ease.
- **Manageable**—A Web-based interface monitors network status and performance and supports remote network management.
- **Rugged**—Encased in a tough, shock resistant, weatherproof, dependable and portable unit. Can stand alone (with external power attachment) or integrated into another product.
- **Flexible**—Supports different interfaces enabling multiple power and hardware types.

Specifications

RapidLink nodes available portable or mountable, and with optional embedded access point.

Concentris Networks are ideal for:

- Emergency or temporary venues
- Convoy communications
- Rapidly deployed security perimeters
- Mobile field offices
- First-responder networks
- Wide area security monitoring

Hardware

Radio: 802.11a
RF Output: variable, max 17 dbm (+/-2dbm)
Operating Frequency: 5.15 - 5.85 GHz
Antenna: 5.5dbi; reverse polarity N-type female connector

Network

Network Interface: 10/100 Industrial Ethernet port
Mesh Routing Protocol: OLSR RFC 3626, with proprietary extensions
Data Rates Supported: 54 Mbps nom
Security Encryption: IPsec, triple Data Encryption Std. 168-bit cipher

Management

Network Management: Web Interface, GUI network manager

Physical

Dimensions: 200 mm x 140 mm x 45 mm
Weight: 1400 grams
Housing: Cast Aluminum

Environmental

Operating Temperature Range: -10 - 80 Celsius
Heat Trap: +6.5 Celsius under full sun (~100,000 Lux)
Humidity: Waterproof
Protection: NEMA 6X, IP-67

Power

Requirements: 10 - 15 VDC, 1 Amp
Output: 100 mWatts
Consumption: 10-Watts nominal