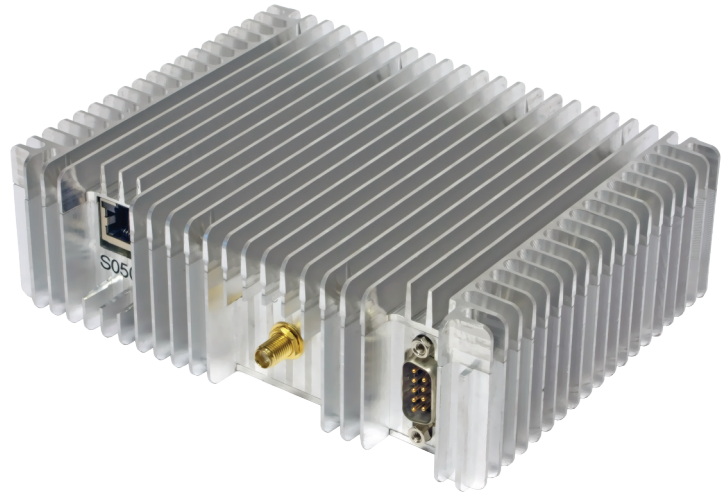


PodNode-I

Robust Ad-Hoc IP MESH COFDM Radio



- ✓ Ad-Hoc Network Secure COFDM
- ✓ Multi-Channel Wireless IP System
- ✓ Robust Reliable Wireless IP network
- ✓ Ruggedised Design
- ✓ Instant Ad-Hoc Networks
- ✓ Non Line of Sight
- ✓ Operates Between Fast Moving Vehicles



The PodNode-I COFDM IP MESH radio is a powerful addition to any wireless communication system. PodNodes in the same network automatically connect to other PodNodes to create a self-healing, mobile and dynamic IP mesh network. Each PodNode automatically routes data around the wireless network, and may easily be configured to operate without user intervention. This makes the system ideal for rapid deployment scenarios.

A PodNode MESH network can support up to 50Mbps data throughput, making it possible to transmit true realtime 1080p HD video. PodNodes support any third party IP device, and thus may be used to expand an existing LAN or MAN. Using Rinicom's powerful COFDM modulation, the PodNode provides robust RF communication in a variety of harsh environments. Multiple PodNodes as part of the same network naturally expand the range of the overall network.

PodNodes operate both in mobile and fixed deployments. Typical fixed deployments include first responder, rapidly deployable wireless networks, surveillance applications and long range wireless IP networks. Mobile applications include vehicle mounted convoy applications, body worn, mobile and advanced ground robot control.

Each PodNode may be controlled remotely through Rinicom's web interface, allowing the network operator to control each PodNode independently, or simply to monitor network status. With or without operator control, a PodNode MESH network 'simply works'.

PodNode-I is based on Rinicom's robust PodNode COFDM IP MESH technology, and is fully compatible with other PodNode MESH products in the range.



PodNode-I Datasheet

Connectors

Ethernet/power out	RJ45
RF connectors	SMA female

RF Interfaces

Antenna 1	TDMA transmit and receive
RF frequency	UHF, L-Band, S-Band
Frequency tuning	1MHz
Modulation	COFDM
Subcarrier modulation	QPSK, 16 QAM, 64 QAM (adaptive)
Output power	+30dBm (1W) Max
Output power tuning	0.5dB steps
Bandwidth	5 to 20 MHz
Bandwidth tuning	1 MHz
MESH capacity	Up to 50 Mbps

IP Interface

Ethernet electrical	100BaseT Ethernet
Standards compliance	IEEE 802.3u, 802.1

Physical

Dimensions	162 mm x 127 mm x 40 mm
Weight	480g
Enclosure	Aluminium with mounting holes
Temperature	-10°C to +40°C
Operating humidity	0 to 90% (non-condensing)

Power

DC input	9-16VDC
Power consumption @ 1W	14W

System Control

RF power	Through web interface
Node control	Through web interface
Frequency control	Through web interface
Encryption control	Through web interface

MESH

Number of nodes	Up to 12
MESH configuration	Ad-hoc, P2MP, P2P
Routing	Automatic routing

Accessories & Compatible Products

Power cable
Antennas
PodNode-R
PodNode-Mini
PodComm
IP camera
H.264 encoder

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