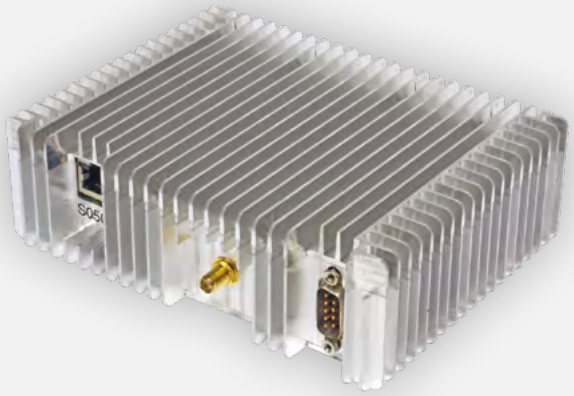
# PodNode-I

## 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 Rinicare'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 deploy-able 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 Rinicare'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 Rinicare's robust PodNode COFDM IP MESH technology, and is fully compatible with other PodNode MESH products in the range.

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# 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 | 162mm x 127mm x 40mm |
| 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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**For any further information, please contact:**

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