

### Features:

- 2.4 GHz Frequency Hopping Spread Spectrum technology
- · Serial to Ethernet conversion
- Seamless roaming capability
- · 460Kbps data rate throughput
- FCC certified and CE marked

### Benefits

- Worldwide license-free operation
- Immunity to jamming and multipath fading
- Allows non-Ethernet devices to connect to Ethernet network
- Supports far ranging mobile applications
- · Shortens time to market
- · Simple installation

# **SNAP2410**

2.4GHz
High-Speed
Frequency
Hopping
Network Access
Point



Designed for use as a base station for WIT2410-based products, the SNAP2410 provides seamless Ethernet connectivity for remote serial devices. The SNAP2410 provides seamless roaming as well. The SNAP2410 connects up to 62 WIT2410 wireless remotes to a 10Base-T Ethernet network. The SNAP family also is ideal for use as access points for a network of RFM HN-10 Series modems. Multiple SNAPs can be used to establish large coverage areas through which wireless remotes can roam without having to re-synchronize. Certified by the FCC and ETSI and CE marked, the SNAP2410 family can be used license-free worldwide.

## **Specifications**

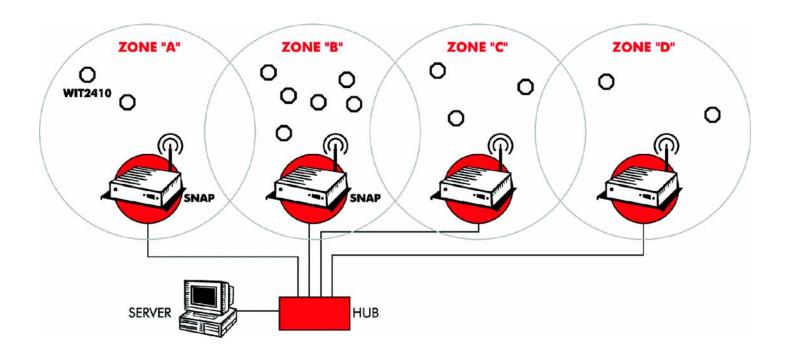
RF Frequency	2400 to 2483 MHz	
Radio Certification	Certified under FCC Part 15.247 and CE marked, license free	
Operating Range	Indoor: 450' to 900' Outdoor: 3000' with dipole antenna, >5 miles with gain antenna	
Radio Network Topology	Star network	
Radio Network Protocol	Dynamically assigned TDMA with ARQ	
Configuration Interface	Asynchronous (RS-232) up to 230.4 Kbps	
I/O Data Rate	10 Mbps Ethernet to the SNAP, 230.4Kbps to each radio	
RF Data Rate	460.8Kbps	
# of Frequency Channels	75	
RF Bandwidth	750 KHz	
Transmit Power Output	10 mW or 100 mW, software selectable	
Receiver Sensitivity	-93 dBm for 10-5 BER	
Supply voltage	9vdc	
Power Consumption	4.5W	
Size (mm)	201 x 144 x 53	
Weight	727g	
Case Material	Aluminum	
Operating Temperature	00C to 700C	
Humidity	20% to 90% (non-condensing)	

# Connectors

Power	2-Pin DIN
Ethernet	RJ-45 (5 on -14,-24)
Configuration Por	DB-9
Alternate Sync IN	RJ-45
Alternate Sync OUT	RJ-45
Antenna	Reverse TNC

# **Indicators**

Power	
Ethernet Transmit Data	
Ethernet Receive Data	
Collision	
Ethernet Link	



## **Ethernet Connectivity**

The SNAP2410 allows limited intelligence or legacy serial devices to transmit unformatted serial data to an application residing on an Ethernet network. Each remote device can be treated as an Ethernet device by the application even though the remote device sends and receives unformatted serial data. The SNAP2410 handles all IP or port assignments as well as encapsulating and un-encapsulating unformatted data into and out of Ethernet datagrams.

## **Seamless Roaming**

Seamless roaming allows applications to be in constant communication with remotes. Even as remotes move from one coverage area to another, constant communication is maintained.

### Scalable

SNAP family members have an integral WIT2410 radio module providing 460Kbps throughput for up to 62 remotes. Multiple SNAPs can be deployed to provide communication for more remote devices.

## Versatile

Configuration of the SNAP family is through a standard RS-232 serial port using the RFM WinSNAP24 Windows<sup>TM</sup>-based software. Alternatively, the SNAP may be configured through a Telnet session. The system designer is given the freedom to choose the wireless communication parameters that provide the optimum performance for each application. Thus, the communication between the base station and the remotes is not 802.11b compatible. Point-to-point and point-to-multipoint modes are supported using a dynamically assigned TDMA mode.

## Reliable

The SNAP2410 family provides both reliable communication and reliable operation. With Frequency Hopping Spread Spectrum technology, the SNAP provides immunity to jamming as well as immunity to multipath fading. Using Automatic Retransmit Request (ARQ) in addition to a 2K buffer, transparent error-free communication is automatic. The built-in data scrambling adds a measure of security. And reliable operation is assured through our stringent QA processes.