

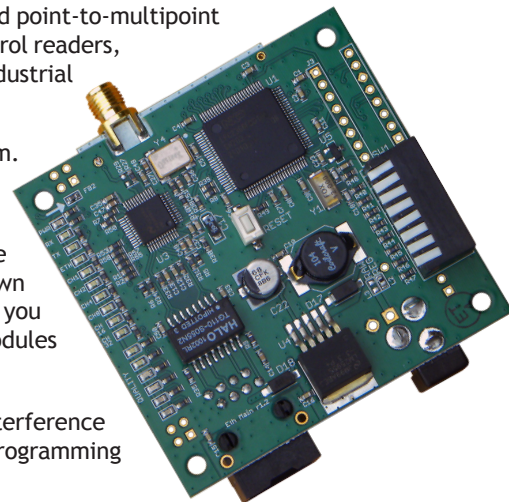
2.4 GHz Ethernet to RF Module

This robust and reliable product allows you to build non-line-of-sight, point-to-point and point-to-multipoint wireless Ethernet connections that connect “fringe” IP devices, including IP access control readers, remote printers, remote PCs, VoIP phones, point-of-sale devices, digital signage or industrial control devices.

The 2.4 GHz band is the most globally accepted unlicensed portion of the RF spectrum. AvaLAN’s unique solution offers 29 non-overlapping channels and maximum legal power to provide five times the range of Wi-Fi through walls or line-of-sight.

The same technology that is used in our popular AW2400xTR/xTP/iTR is here made available to you in an assembled and tested module for easy integration into your own products. Get started with the Evaluation Kit that provides two modules and everything you need to begin testing and development. Then when you are ready to deploy, buy the modules in packs of ten or call AvaLAN Sales for larger quantity pricing.

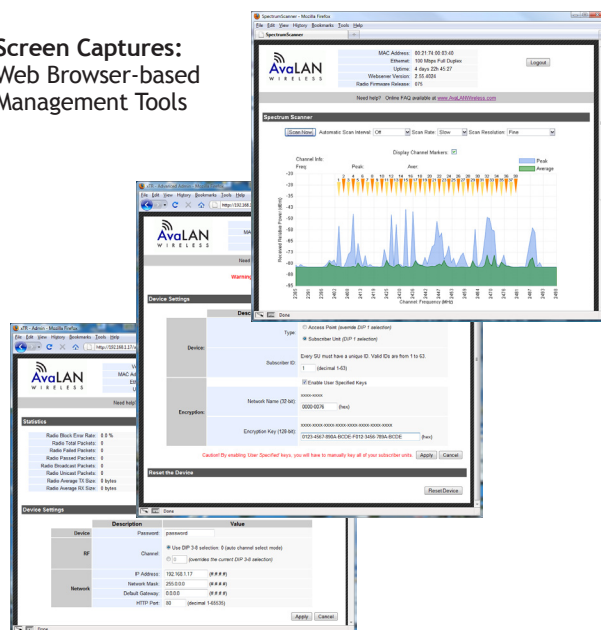
AvaLAN’s products offer the ideal combination of price, range, data rate, security, interference avoidance, quality-of-service, and a simple plug and play set up with minimal user programming required.



Features

- 29 non-overlapping channels providing unique flexibility to avoid or penetrate interference
- Five times greater range than Wi-Fi, through walls or line-of-sight
- Up to 30 mile range to connect to difficult locations
- 128 bit AES encryption, FIPS 197 - NIST Certified
- Browser interface provides easy user-programming, remote diagnostics and link analysis including a graphical RF spectrum analyzer
- Can operate up to 29 access points, each on its own non-overlapping channel with up to 16 clients per access point
- 4 Watts EIRP, Maximum legal radiated power for long range penetration
- One Watt power consumption is ready for solar applications
- Tiny 66 by 70 mm size fits almost anywhere
- -40° to +80°C for extreme temperature operation
- Evaluation kit available providing two modules and everything you need for engineering evaluation and development

Screen Captures: Web Browser-based Management Tools



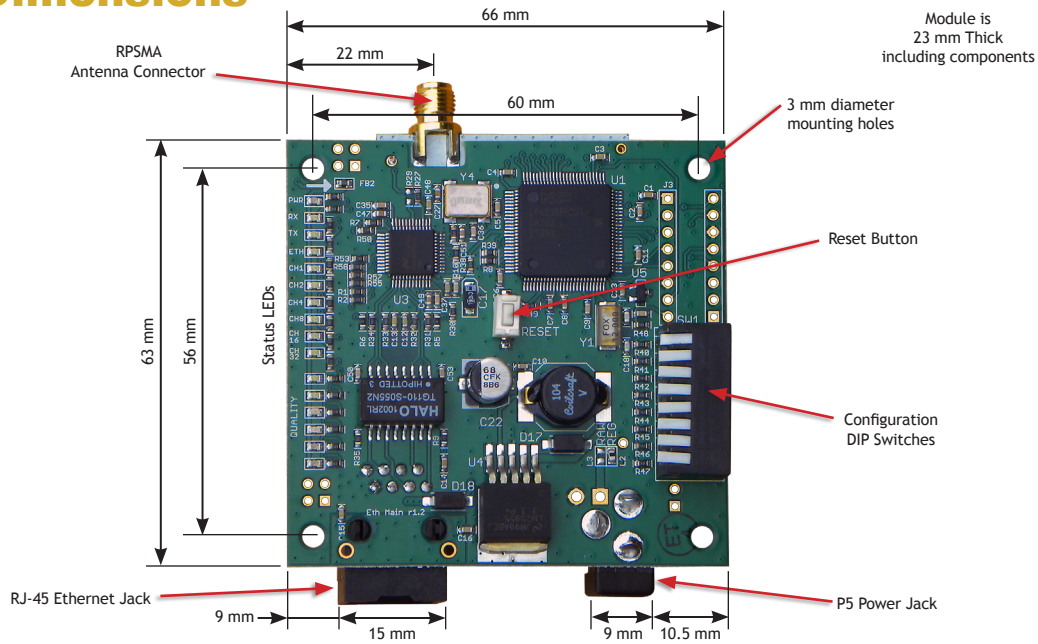
Application Example



Provide robust, secure wireless control and data communication for a mobile robot.



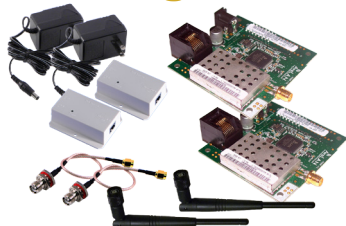
Physical Dimensions



Technical specifications

Characteristic	Specification/Description
RF transmission rate	1.536 Mbps
Ethernet data rate	935 Kbps
RF Output Power	+21 dBm (4 Watts EIRP with 15 dBi antenna)
Receiver Sensitivity	-97 dBm at 10 ⁻⁴ Bit Error Rate
Range	Up to 30 miles line-of-sight with 15 dBi antennas
RF channels/bandwidth	29 non-overlapping with 2.0833 MHz spacing and 1.75 MHz bandwidth, automatic or manually selectable via web browser interface
Connector types	RF: RPTNC Female / 10/100 base T Ethernet: RJ-45
Data Encryption	128-bit AES, FIPS197, keys set through password-protected browser interface
Error correction technique	Sub-block error detection and retransmission
Adjacent band rejection	SAW receiver filter attenuates cellular and pager interference
Power regulation	Built-in switching regulator
Browser management tools	QoS Statistics, Network Settings, Spectrum Analyzer, Firmware Upgrade
Power consumption	Transmit: 1.7 Watts Receive: 0.8 Watts
Voltage	9 to 48 VDC via unused pins in RJ-45 jack - pins 4,5 positive, 7,8 ground
Power regulation	Switching regulator
Transmit current draw	140 ma at 12 VDC
Operating Temperature Range	-40 °C to +80 °C
Size	70 x 66 x 23 mm, 40 grams

Ordering Information



AW2400mTR-EVAL

2.4 GHz RF to Ethernet Module Evaluation Kit

Contents:

- (2) AW2400mTR Radio Modules
- (2) AW2-2400 Omnidirectional Antennas
- (2) AW-P8 8" Antenna to Radio Pigtail Cables
- (2) AW-POE Power Over Ethernet Injectors
- (2) 110 VAC to 12 VDC power adapters

AW2400mTR-10

2.4 GHz RF to Ethernet Module 10-Pak

Contents:

- (10) AW2400mTR Radio Modules

Call AvaLAN for higher quantity price quotes.

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