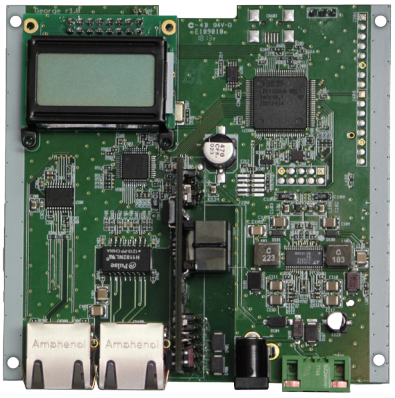
900 MHz Ethernet and Serial Module



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.

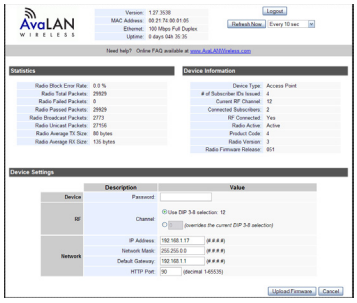
The same technology that is used in our popular AW900F is here made available to you in an assembled and tested module for easy integration into your own products. Get started with the Evaluation Kit that provides two modules and everything you need to begin testing and development. Then when you are ready to deploy, buy the modules in packs of ten or call AvaLAN Sales for larger quantity pricing.

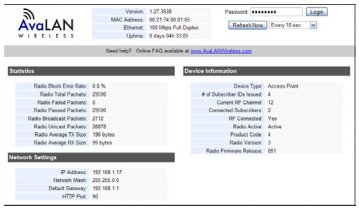
AvaLAN’s products offer the ideal combination of price, range, data rate, security, interference avoidance, quality-of-service, and a simple plug and play set up with minimal user programming required.

Features

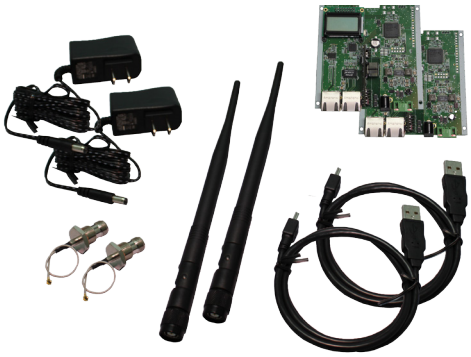
- Remote diagnostics and link analysis with browser interface
- Module can be configured as an access point or subscriber unit
- High RF output power provides maximum foliage and/or wall penetration
- Line-of-sight range up to 40 miles with 15 dBi antenna
- Evaluation kit available providing two modules and everything you need for engineering evaluation and development

Screen Captures:
Web Browser-based Management Tools





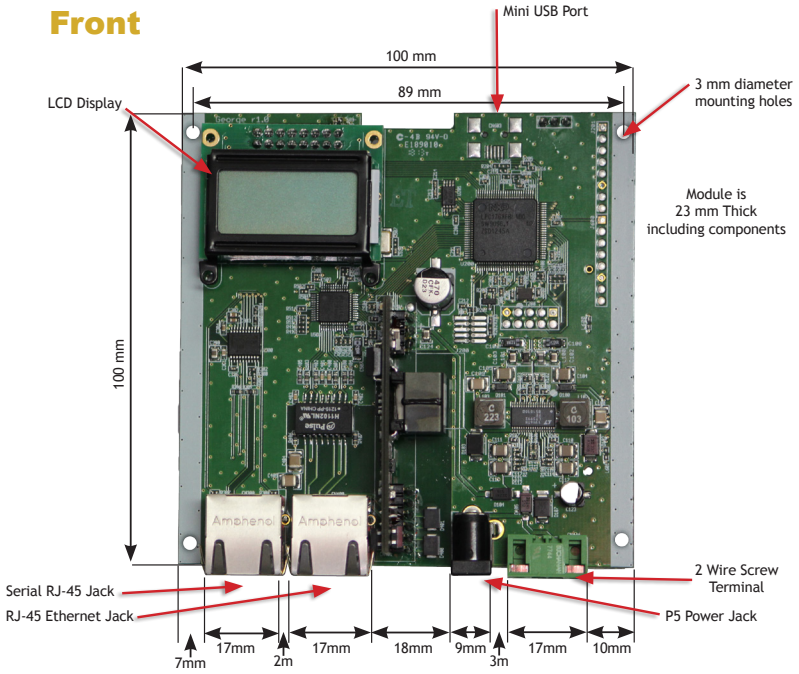
EVALUATION KIT



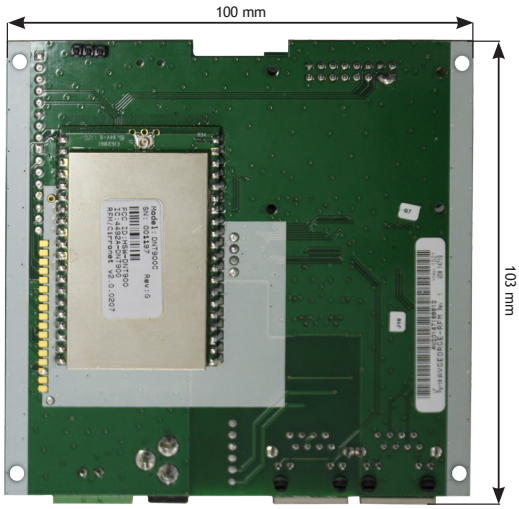
- AW900FM Radio Modules
- AW2-900 2.5 dBi Omnidirectional Antennas
- AW-P8 8” Antenna to Radio Pigtail Cables
- AW-POE Power Over Ethernet Injectors
- 110 VAC to 12 VDC power adapters

Physical Dimensions

Front



Back



Technical specifications

PARAMETER	SPECIFICATION
RF Data Rate	200 kbps
Frequency Range	902.75 MHz to 927.25 MHz
Transmit Power	Selectable from 1 mW to 1 W
Receiver Sensitivity	-98 dBm at 10^{-5} BER
Access Scheme	TDMA
Modulation/Spreading	FSK - FHSS
Range	Line-of-sight range up to 60 miles with directional antennas, 5 miles with included omnidirectional antenna
Browser Management Tools	Data Communication Statistics, Network Settings, Transmit Power
Operating Environment	-40ºC to +70ºC
Ethernet Data Interface	10/100baseT
Serial Data Interface	Programmable RS-232 or RS-485, baud rate up to 115,200
Connectors	RJ-45 for Ethernet, RJ-45 for Serial, P5 and Phoenix for Power, Mini-USB for Encryption Settings
Power System	802.3af 48 VDC Power Over Ethernet or 5-30 VDC through power connectors
Power Consumption	When transmitting at +30 dBm: 6.7 Watts When receiving: 1.0 Watts
Antenna	RPTNC Connector, 50 Ohm Impedance. 2.5 dBi flexible omnidirectional antenna included.
Warranty	1 Year Parts & Labor, XTRa-Care Extended Warranty 2 Year Extension available at nominal cost
Certification	FCC, IC certified

Ordering Information

AW900FM-EVAL

900 MHz RF to Ethernet Module Evaluation Kit

Contents:

- (2) AW900FM Radio Modules
- (2) AW2-900 2.5 dBi 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

AW900FM-10

900 MHz RF to Ethernet Module 10-Pak

Contents:

- (10) AW900FM Radio Modules

07.01.2013