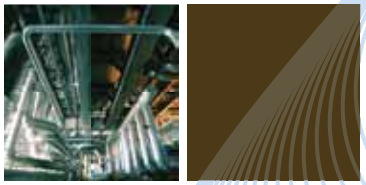
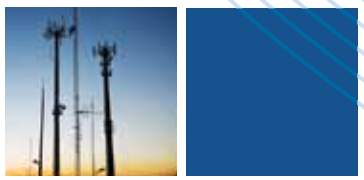
Surveillance Camera

Long Range WIRELESS

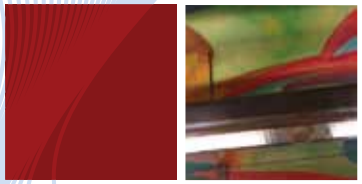


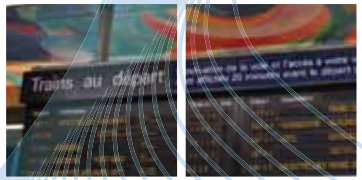
AvaLAN Wireless
866.533.6216
avalanwireless.com



2010 Product Guide

SMART GRID





Access Control
IP Surveillance
Traffic Control
Remote Control
Data Gathering
Lighting Control
Wireless **SCADA**
Irrigation Control
Wireless Backhaul
Industrial Wireless
Watershed Management
Storage Tank Monitoring

AvaLAN WIRELESS

DESIGNED FOR

Easy Integration

Robust

These radio pairs provide pre-configured plug and play point-to-point secure connections for applications such as digital signage and surveillance.

Wireless Bridges

AW900xTR-PAIR — MSRP $1299

900 MHz Outdoor Wireless Ethernet Bridge

Pre-configured and easy to deploy outdoor long range industrial wireless Ethernet Bridge.

- **LIMITED TIME BONUS!** Includes (2) 11 dBi directional Yagi antennas
- Rugged outdoor package meets IP66 Standard
- Built-in web browser interface providing easy configuration, status monitoring and with an RF spectrum analyzer to diagnose interference issues
- Automatic RF channel selection to minimize interference
- 1.54 Mbps data rate
- Range up to 40 miles depending on antenna and terrain
- 4 Watts EIRP with 15 dBi directional antennas, no FCC license required
- 128 bit AES encryption, FIPS 197

AW900xTP-PAIR — MSRP $1799

900 MHz Outdoor Ethernet Panel Bridge

The same radio modules as above integrated with high-gain 12.5 dBi flat panel antennas.

- Same electronic features as the AW900xTR-PAIR
- Easy to install and use
- Weatherproof aluminum NEMA enclosures, pole-mounting brackets included
- May be used indoors or out
- Size 13" square

AW900iTR-PAIR — MSRP $949

900 MHz Indoor Wireless Ethernet Bridge

The same radio modules as described above, but in convenient small low cost packages for indoor applications.

- Same features as the AW900xTR-PAIR
- Easy to install and use
- AW2-900 2.5 dBi omnidirectional antennas included

AW2400xTR-PAIR — MSRP $1299

2.4 GHz Outdoor Wireless Ethernet Bridge

Non-Wi-Fi, robust, reliable and easy to deploy outdoor long range industrial wireless Ethernet Bridge. It operates in the 2.4 GHz band with 38 interference-avoiding channels and five times greater range than Wi-Fi through walls or line-of-sight.

- Rugged outdoor package meets IP66 Standard
- Built-in web browser interface providing easy configuration, status monitoring and with an RF spectrum analyzer to diagnose interference issues
- Automatic RF channel selection to minimize interference
- 1.54 Mbps data rate
- Range up to 40 miles depending on antenna and terrain
- 128 bit AES encryption, FIPS 197
- 4 Watts EIRP with 19 dBi directional antennas, no FCC license required
- AW2-2400 2 dBi omnidirectional antennas included

AW2400xTP-PAIR — MSRP $1799

2.4 GHz Outdoor Ethernet Panel Bridge

The same radio modules as above integrated with high-gain 19 dBi flat panel antennas.

- 4 Watts EIRP with 19 dBi antennas, no FCC license required
- Same electronic features as the AW2400xTR-PAIR
- Easy to install and use
- Weatherproof aluminum NEMA enclosures, pole-mounting brackets included
- May be used indoors or out
- Size 13" square

AW2400iTR-PAIR — MSRP $949

2.4 GHz Indoor Wireless Ethernet Bridge

The same radio modules as described above, but in convenient small low cost packages for indoor applications.

- Same electronic features as the AW2400xTR-PAIR
- Easy to install and use
- AW2-2400 2 dBi omnidirectional antennas included

AvaLAN WIRELESS

AW900R2-PAIR — MSRP $949

900 MHz Outdoor Wireless RS-232 Bridge

Outdoor long range industrial RS232 wireless bridge ideal for connecting serial devices.

- operates in the 900 MHz band for excellent non line-of-sight penetration
- Easy re-configuration and performance monitoring through a built-in USB port
- Configuration utility includes RF spectrum analyzer to diagnose interference issues
- Automatic RF channel selection to minimize interference
- Rugged outdoor package meeting IP66 Standard with sealing gland for wiring
- 9,600 to 115,200 bps data rate with up to 40 mile range
- 128 bit AES encryption, FIPS 197
- Low power consumption, no FCC license required

AW5800HTP-PAIR — MSRP $2799

5.8 GHz Outdoor 5 Mbps Wireless Ethernet Bridge

The radios in this bridge provide higher data rate and higher power for wireless connectivity to devices such as megapixel surveillance cameras.

- Up to 5 megabits per second
- 100 Watts Effective Isotopic Radiated Power (EIRP)
- Built-in browser interface for easy configuration and performance monitoring
- Built-in RF spectrum analyzer to diagnose interference issues
- Automatic selection among 20 non-overlapping RF channels to avoid interference
- Rugged outdoor enclosure with 23 dBi flat panel antennas
- Pole-mounting brackets included
- 128 bit AES encryption, FIPS 197
- Up to 15 miles line-of-sight without sacrificing bandwidth, security or performance

AW5800xTR-PAIR — MSRP $1499

5.8 GHz Outdoor Wireless Ethernet Bridge

Pre-configured, easy to deploy outdoor long range industrial wireless Ethernet Bridge with more than 50 operating channels available for interference mitigation.

- Built-in browser interface for easy configuration and performance monitoring
- Built-in RF spectrum analyzer to diagnose interference issues
- Automatic RF channel selection to minimize interference
- 1.54 Mbps data rate
- Range up to 30 miles line of sight
- 128 bit AES encryption, FIPS 197

AW2400R2-PAIR — MSRP $949

2.4 GHz Outdoor Wireless RS-232 Bridge

A point-to-point transparent wireless bridge providing RS-232 serial connection of data monitoring and industrial control devices.

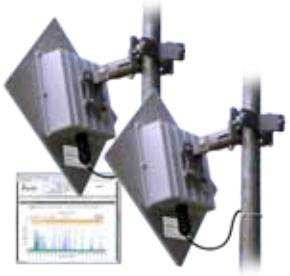
- 38 narrow-band channels in the 2.4 GHz band for excellent interferance avoidance
- Easy re-configuration and performance monitoring through a built-in USB port
- Configuration utility includes RF spectrum analyzer to diagnose interference issues
- Automatic RF channel selection to minimize interference
- Rugged outdoor package meeting IP66 Standard with sealing gland for wiring
- 9,600 to 115,200 bps data rate with up to 40 mile range
- 128 bit AES encryption, FIPS 197
- Low power consumption, no FCC license required

AW4900HTP-PAIR — MSRP $2799

4.9 GHz Public Safety Band Wireless Ethernet Bridge

The radios in this bridge provide higher data rate and higher power for wireless connectivity to devices such as megapixel surveillance cameras.

- For use by qualified agencies having a Public Safety Band license
- Up to 5 megabits per second
- 30 Watts Effective Isotopic Radiated Power (EIRP)
- Built-in browser interface for easy configuration and performance monitoring
- Built-in RF spectrum analyzer to diagnose interference issues
- Rugged outdoor enclosure with 19 dBi flat panel antennas
- Pole-mounting brackets included
- 128 bit AES encryption, FIPS 197
- Up to 5 miles line-of-sight without sacrificing bandwidth, security or performance



AW5800xTP-PAIR — MSRP $2399

5.8 GHz Outdoor Ethernet Panel Bridge

The same radio modules described at left integrated with high-gain 23 dBi flat panel antennas.

- Same features as the AW5800xTR-PAIR
- Easy to install and use
- Weatherproof aluminum NEMA enclosures, pole-mounting brackets included
- May be used indoors or out
- Size 12” square for each unit

These radios can be configured as point-to-multipoint or point-to-point systems, providing robust, secure, long range wireless connectivity.

Multi-Point Radios

AW900xTR — MSRP $699

900 MHz Outdoor Wireless Ethernet Radio

Robust and reliable outdoor long range industrial wireless Ethernet radio for both point to point and point to multi-point connectivity.

- Rugged outdoor package meets IP66 Standard
- Built-in web browser interface providing easy configuration, status monitoring and with an RF spectrum analyzer to diagnose interference issues
- Can be configured as a subscriber unit or as an access point serving up to 16 subscribers
- Automatic RF channel selection to minimize interference
- 1.54 Mbps data rate
- Range up to 40 miles depending on antenna and terrain
- 128 bit AES encryption, FIPS 197
- Low power consumption, no FCC license required

AW900xTP — MSRP $899

900 MHz Outdoor Wireless Ethernet Panel

The same radio module as described above integrated with a high-gain 12.5 dBi flat panel antenna.

- Same electronic features as the AW900xTR
- Easy to install and use
- Weatherproof aluminum NEMA enclosure, pole-mounting bracket included
- May be used indoors or out
- Size 13” square

AW900iTR — MSRP $499

900 MHz Indoor Wireless Ethernet Radio

The same radio module as described above, but in a convenient small low cost package for indoor applications.

- Same electronic features as the AW900xTR
- Easy to install and use
- Built-in browser interface allows easy configuration, performance monitoring, RF spectrum analyzer and firmware update capability
- Can be configured as an access point or subscriber unit
- AW2-900 2.5 dBi omnidirectional antenna included
- 6 VDC power supply included

AW2400xTR — MSRP $699

2.4 GHz Outdoor Wireless Ethernet Radio

Our newest technology radio transceiver designed for point-to-point and point-to-multipoint wireless Ethernet applications, operating in the 2.4 GHz band with 38 interference-avoiding channels and five times greater range than Wi-Fi through walls or line-of-sight.

- Rugged outdoor package meets IP66 Standard
- 4 Watts EIRP with 19 dBi antenna, no FCC license required
- Built-in web browser interface providing easy configuration, status monitoring and with an RF spectrum analyzer to diagnose interference issues
- Can be configured as a subscriber unit or as an access point serving up to 16 subscribers
- Automatic RF channel selection to minimize interference
- 1.54 Mbps data rate
- Range up to 40 miles depending on antenna and terrain
- 128 bit AES encryption, FIPS 197

AW2400xTP — MSRP $899

2.4 GHz Outdoor Wireless Ethernet Panel

The same radio module as described above integrated with a high-gain 19 dBi flat panel antenna.

- 4 Watts EIRP with no license needed!
- Same electronic features as the AW2400xTR
- Easy to install and use
- Weatherproof aluminum NEMA enclosure, pole-mounting bracket included
- May be used indoors or out
- Size 13” square

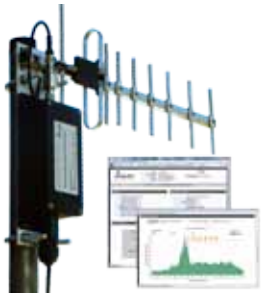
AW2400iTR — MSRP $499

2.4 GHz Indoor Wireless Ethernet Radio

The same radio module as described above, but in a convenient small low cost package for indoor applications.

- Same electronic features as the AW2400xTR
- Easy to install and use
- Built-in browser interface allows easy configuration, performance monitoring, RF spectrum analyzer and firmware update capability
- Can be configured as an access point or subscriber unit
- AW2-2400 2 dBi omnidirectional antenna included
- 6 VDC power supply included

AvaLAN WIRELESS

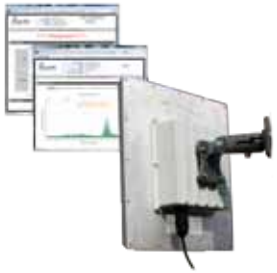


AW900xTR-INTL — MSRP $699

915 MHz International Outdoor Wireless Ethernet Radio

The same radio module as the AW900xTR with the same features but providing 6 RF channels between 915 and 926 MHz for non-USA applications where the lower 6 channels of the USA band may not be used.

- Special firmware version for International use, otherwise functionally identical to the AW900xTR
- Compatible and non-interfering with GSM band
- Ideal for independent VOIP providers
- Robust and reliable Ethernet connectivity for remote areas



AW900xTP-INTL — MSRP $899

915 MHz International Outdoor Wireless Ethernet Panel

The same integrated radio and 12.5 dBi antenna as the AW900xTP with the same features but providing 6 RF channels between 915 and 926 MHz for non-USA applications where the lower 6 channels of the USA band may not be used.

- Special firmware version for International use, otherwise functionally identical to the AW900xTP
- Compatible and non-interfering with GSM band
- Ideal for independent VOIP providers
- Robust and reliable Ethernet connectivity for remote areas

AW5800xTR — MSRP $749

5.8 GHz Outdoor Wireless Ethernet Radio

Our newest technology 5.8 GHz radio transceivers designed for point-to-point and point-to-multipoint wireless Ethernet applications. This higher frequency band provides more channels (58 vs. 12) and less interference when line-of-sight operation is possible.

- Built-in browser interface for easy configuration and performance monitoring
- Built-in RF spectrum analyzer to diagnose interference issues
- Can be configured as an access point or subscriber unit
- Each access point can support up to 16 subscriber units
- Automatic RF channel selection to minimize interference
- 1.54 Mbps data rate
- Range up to 30 miles line of sight
- 128 bit AES encryption, FIPS 197

AW900R4 — MSRP $499

900 MHz Outdoor Wireless RS-485 Radio

An outdoor rugged package for our new RS-485 point-to-multipoint interfaced radio operating in the 900 MHz band for excellent penetration in non line-of-sight applications.

- Easy re-configuration and performance monitoring through a built-in USB port
- Configuration utility includes RF spectrum analyzer to diagnose interference issues
- Automatic RF channel selection to minimize interference
- Rugged outdoor package meeting IP66 Standard with sealing gland for wiring
- 9,600 to 115,200 bps data rate with up to 40 mile range
- 128 bit AES encryption, FIPS 197
- Low power consumption, no FCC license required

AW2400R4 — MSRP $499

2.4 GHz Outdoor Wireless RS-485 Radio

An outdoor rugged package for our new RS-485 point-to-multipoint interfaced radio operating in the 2.4 GHz band providing 38 interference-avoiding channels with five times the range of Wi-Fi, line of sight and through moderate obstructions.

- Easy re-configuration and performance monitoring through a built-in USB port
- Configuration utility includes RF spectrum analyzer to diagnose interference issues
- Automatic RF channel selection to minimize interference
- Rugged outdoor package meeting IP66 Standard with sealing gland for wiring
- 9,600 to 115,200 bps data rate with up to 40 mile range
- 128 bit AES encryption, FIPS 197
- Low power consumption, no FCC license required

AW5800xTP — MSRP $1199

5.8 GHz Outdoor Wireless Ethernet Panel

The same radio technology as the AW5800xTR integrated with a high-gain 23 dBi flat panel antenna.

- Same electronic features as the AW5800xTR
- Easy to install and use
- Weatherproof aluminum NEMA enclosure, pole-mounting bracket included
- May be used indoors or out
- Size 12” square

Integrate AvaLAN radio technology into your own products or systems with these flexible and easy to use modules.
We offer four different electrical interfaces: Ethernet, SPI, RS-232 and RS-485.
We combine this with two different RF bands: 900 MHz and 2.4 GHz.

RF Modules

Ethernet to RF		MSRP
AW900mTR-EVAL	900 MHz Evaluation Kit	$799
AW2400mTR-EVAL	2.4 GHz Evaluation Kit	$799
AW900mTR-10	900 MHz Module 10-Pak	$2499
AW2400mTR-10	2.4 GHz Module 10-Pak	$2499

The same technology that is used in our AW900xTR radio described on page 4, provided as an assembled and tested module for easy integration. Get started with the Evaluation Kit that provides two modules and everything you need to begin testing and development. Then buy the modules in packs of 10 or contact AvaLAN Sales for larger quantity pricing.

- 70 x 66 x 23 mm, 40 grams
- RJ-45 jack for Ethernet, P5 or POE for power, RPSMA for antenna
- 1.7 Watts transmit, 0.8 Watts receive, 5 to 48 VDC

RS-232 to RF		MSRP
AW900R2-EVAL	900 MHz Evaluation Kit	$799
AW2400R2-EVAL	2.4 GHz Evaluation Kit	$799
AW900R2-10	900 MHz Module 10-Pak	$1949
AW2400R2-10	2.4 GHz Module 10-Pak	$1949

This module provides a transparent RF link for RS-232 serial point-to-point connection of industrial control and data monitoring devices. Get started with the Evaluation Kit that provides two modules and everything you need to begin testing and development. Then buy the modules in packs of 10 or contact AvaLAN Sales for larger quantity pricing.

- 64 x 66 x 7 mm, 24 grams
- 0.75 Watts transmit, 0.5 Watts receive, 100 µW standby, 5 to 48 VDC
- Phoenix screw terminals for data and power, RPSMA for antenna
- USB interface with Software Utility for setup and status monitoring

SPI (Serial Peripheral Interface) to RF		MSRP
AW900mSPI-EVAL	900 MHz Evaluation Kit	$479
AW2400mSPI-EVAL	2.4 GHz Evaluation Kit	$479
AW900mSPI-10	900 MHz Module 10-Pak	$1249
AW2400mSPI-10	2.4 GHz Module 10-Pak	$1249

When your application needs just the radio technology from AvaLAN to connect to your own microcontroller, this tiny low cost module provides an easily integrated data-to-wireless interface. Get started with the Evaluation Kit that provides two modules and everything you need to begin testing and development. Then buy the modules in packs of 10 or contact AvaLAN Sales for larger quantity pricing.

- 50 x 50 x 7 mm, 10 grams
- RPSMA for antenna, 17 PC edge connections for power and data
- 0.75 Watts transmit, 0.5 Watts receive, 3.3 VDC
- Synchronous high speed SPI (Serial Peripheral Interface)
- UART (Universal Asynchronous Receiver/Transmitter) to 115.2 kilobaud
- SPI or UART interface chosen by firmware

RS-485 to RF		MSRP
AW900R4-EVAL	900 MHz Evaluation Kit	$799
AW2400R4-EVAL	2.4 GHz Evaluation Kit	$799
AW900R4-10	900 MHz Module 10-Pak	$1949
AW2400R4-10	2.4 GHz Module 10-Pak	$1949

This module provides a transparent RF link for RS-485 serial point-to-multipoint connection of industrial control and data monitoring devices. Get started with the Evaluation Kit that provides two modules and everything you need to begin testing and development. Then buy the modules in packs of 10 or contact AvaLAN Sales for larger quantity pricing.

- 64 x 66 x 7 mm, 24 grams
- 0.75 Watts transmit, 0.5 Watts receive, 100 µW standby, 5 to 48 VDC
- Phoenix screw terminals for data and power, RPSMA for antenna
- USB interface with Software Utility for setup and status monitoring

AvaLAN WIRELESS

Use these excellent tools to survey your site so that you can install a trouble-free system.

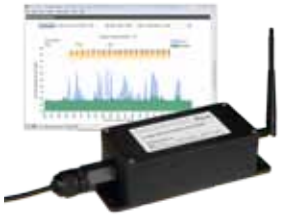
Spectrum Analyzers

AW900-SPEC MSRP $499

900 MHz Site Survey Spectrum Analyzer

AvaLAN 900 MHz radio receiver and spectrum analysis functionality provides a sensitive site survey tool in a rugged, weatherproof enclosure.

- IP Addressable for easy connection to tcp/ip networks
- Built-in browser interface
- Tunes from 879 to 945 MHz in 500 KHz steps
- -97 dBm sensitivity
- Can average up to 256 samples per point
- Logarithmic graph of peak and average power vs. frequency
- Mount outdoors with any of AvaLAN's directional antennas (small 2.5 dBi antenna included)



AW2400-SPEC MSRP $499

2.4 GHz Site Survey Spectrum Analyzer

AvaLAN 2.4 GHz radio receiver and spectrum analysis functionality provides a sensitive site survey tool in a rugged, weatherproof enclosure.

- IP Addressable for easy connection to tcp/ip networks
- Built-in browser interface
- Tunes from 2.385 GHz to 2.498 GHz in 1 MHz steps
- -97 dBm sensitivity
- Can average up to 256 samples per point
- Logarithmic graph of peak and average power vs. frequency
- Mount outdoors with any of AvaLAN's directional antennas (small 2 dBi antenna included)

AW5800-SPEC MSRP $499

5.8 GHz Site Survey Spectrum Analyzer

AvaLAN 5.8 GHz radio receiver and spectrum analysis functionality provides a sensitive site survey tool in a rugged, weatherproof enclosure.

- IP Addressable for easy connection to tcp/ip networks
- Built-in browser interface for easy configuration and performance monitoring
- Tunes from 5.724 GHz to 5.853 GHz in 1 MHz steps
- -97 dBm sensitivity
- Can average up to 256 samples per point
- Logarithmic graph of peak and average power vs. frequency
- Mount outdoors with any of AvaLAN's directional antennas (small 5 dBi antenna included)

FIPS 140-2 HIGH SECURITY ENCRYPTION

AvaLAN has developed a special module that provides data encryption meeting the National Institute of Standards and Technology FIPS 140-2 Level 2 Standard.

AW140 MSRP CALL

FIPS 140-2 High Security Encryption Module

This AvaLAN developed module allows you to build your own products that can easily acquire the CMVP certificate for FIPS 140-2 256-bit encryption. The simple SPI interface allows for rapid and simple integration with your microcontroller circuitry, saving you engineering time and money to certify your product.

- Fast real time AES 128, 192 or 256-bit encryption at 5 Mbps
- Tamper-evident coating
- SPI (Serial Peripheral Interface) for data connected via a 10-pin header (cannot access or modify encryption key through this interface)
- Separate USB interface for setting passwords and encryption key via a simple terminal interface on any PC. (Set up the module and take your laptop away.)
- Low power consumption, small size, wide temperature range

AvaLAN's new High Security FIPS 140-2 Module is also available in many of our wireless radios and modules.

HIGH SECURITY VERSIONS

	Wireless Bridges			Multi-Point Radios		
Technology & Configuration	Regular Part #	High Security Part #	High Security MSRP	Regular Part #	High Security Part #	High Security MSRP
900 MHz Outdoor Ethernet	AW900xTR-PAIR	AWS900xTR-PAIR	CALL	AW900xTR	AWS900xTR	CALL
900 MHz Outdoor Ethernet Panel	AW900xTP-PAIR	AWS900xTP-PAIR	CALL	AW900xTP	AWS900xTP	CALL
2.4 GHz Outdoor Ethernet	AW2400xTR-PAIR	AWS2400xTR-PAIR	CALL	AW2400xTR	AWS2400xTR	CALL
2.4 GHz Outdoor Ethernet Panel	AW2400xTP-PAIR	AWS2400xTP-PAIR	CALL	AW2400xTP	AWS2400xTP	CALL
900 MHz Outdoor RS-232/RS-485	AW900R2-PAIR	AWS900R2-PAIR	CALL	AW900R4	AWS900R4	CALL
2.4 GHz Outdoor RS-232/RS-485	AW2400R2-PAIR	AWS2400R2-PAIR	CALL	AW2400R4	AWS2400R4	CALL

	Module Evaluation Kits			Module 10-Paks		
RF Band & Interface	Regular Part #	High Security Part #	High Security MSRP	Regular Part #	High Security Part #	High Security MSRP
900 MHz Ethernet	AW900mTR-EVAL	AWS900mTR-EVAL	CALL	AW900mTR-10	AWS900mTR-10	CALL
900 MHz SPI	AW900mSPI-EVAL	AWS900mSPI-EVAL	CALL	AW900mSPI-10	AWS900mSPI-10	CALL
900 MHz RS-232	AW900R2-EVAL	AWS900R2-EVAL	CALL	AW900R2-10	AWS900R2-10	CALL
900 MHz RS-485	AW900R4-EVAL	AWS900R4-EVAL	CALL	AW900R4-10	AWS900R4-10	CALL
2.4 GHz Ethernet	AW2400mTR-EVAL	AWS2400mTR-EVAL	CALL	AW2400mTR-10	AWS2400mTR-10	CALL
2.4 GHz SPI	AW2400mSPI-EVAL	AWS2400mSPI-EVAL	CALL	AW2400mSPI-10	AWS2400mSPI-10	CALL
2.4 GHz RS-232	AW2400R2-EVAL	AWS2400R2-EVAL	CALL	AW2400R2-10	AWS2400R2-10	CALL
2.4 GHz RS-485	AW2400R4-EVAL	AWS2400R4-EVAL	CALL	AW2400R4-10	AWS2400R4-10	CALL

AvaLAN's dome and housing kits replace costly cables and trenching with a point-to-point solution that supports a variety of fixed and PTZ network cameras from leading camera manufacturers.

Please Note: Other interfaces and High Security Versions are available on a special basis. Contact AvaLAN Sales for more information.

Integrated Wireless Camera Housings

AW-D2-900 — MSRP $1999

900 MHz Integrated Wireless Dome Housing

AvaLAN 900 MHz AW900mTR radio inside a Dotworkz™ D2 outdoor dome housing for PTZ cameras.

- Impact-resistant polycarbonate housing works with many popular IP PTZ (pan-tilt-zoom) video cameras from Axis, Canon, Sony, Toshiba, Panasonic, etc.
- Includes a matching pre-configured AvaLAN outdoor radio (AW900xTR) to complete the wireless link to the host network.
- 24 VDC power (120 VAC transformer included)
- Heater/blower in housing provides 15°F to 105°F optimal camera operation.
- Small omnidirectional antennas are included or use optional AW10-900 panel antennas or AW11-900 or AW15-900 Yagi antennas for greater range.

AW-D2-2400 — MSRP $1999

2.4 GHz Integrated Wireless Dome Housing

AvaLAN 2.4 GHz AW2400mTR radio inside a Dotworkz™ D2 outdoor dome housing for PTZ cameras.

- Impact-resistant polycarbonate housing works with many popular IP PTZ (pan-tilt-zoom) video cameras from Axis, Canon, Sony, Toshiba, Panasonic, etc.
- Includes a matching pre-configured AvaLAN outdoor radio (AW2400xTR) to complete the wireless link to the host network.
- 24 VDC power (120 VAC transformer included)
- Heater/blower in housing provides 15°F to 105°F optimal camera operation.
- Small omnidirectional antennas are included or use optional 19 dBi AW19-2400 panel antenna for greater range.

AW-D2-5800 — MSRP $2199

5.8 GHz Integrated Wireless Dome Housing

AvaLAN 5.8 GHz AW5800mTR radio inside a Dotworkz™ D2 outdoor dome housing for PTZ cameras.

- Impact-resistant polycarbonate housing works with many popular IP PTZ (pan-tilt-zoom) video cameras from Axis, Canon, Sony, Toshiba, Panasonic, etc.
- Includes a matching pre-configured AvaLAN outdoor radio (AW5800xTR) to complete the wireless link to the host network.
- 24 VDC power (120 VAC transformer included)
- Heater/blower in housing provides 15°F to 105°F optimal camera operation.
- Small omnidirectional antennas are included or use optional 23 dBi AW23-5800 panel antenna for greater range.

AW-H900 — MSRP $1699

900 MHz Integrated Wireless Tube Housing

AvaLAN 900 MHz AW900mTR radio inside a Videoalarm™ ACH313HBWM outdoor tube housing for PTZ cameras.

- Rugged extruded aluminum housing works with most IP-ready video cameras and is designed for those situations where pan and tilt is not needed.
- Includes a matching pre-configured AvaLAN outdoor radio (AW900xTR) to complete the wireless link to the host network.
- 24 VDC power (120 VAC transformer included)
- Heater/blower in housing provides -20°F to 120°F operation.
- Small omnidirectional antennas are included or use optional AW10-900 panel antennas or AW11-900 or AW15-900 Yagi antennas for greater range.

AW-H2400 — MSRP $1699

2.4 GHz Integrated Wireless Tube Housing

AvaLAN 2.4 GHz AW2400mTR radio inside a Videoalarm™ ACH313HBWM outdoor tube housing for PTZ cameras.

- Rugged extruded aluminum housing works with most IP-ready video cameras and is designed for those situations where pan and tilt is not needed.
- Includes a matching pre-configured AvaLAN outdoor radio (AW2400xTR) to complete the wireless link to the host network.
- 24 VDC power (120 VAC transformer included)
- Heater/blower in housing provides -20°F to 120°F operation.
- Small omnidirectional antennas are included or use optional 19 dBi AW19-2400 panel antenna for greater range.

AW-H5800 — MSRP $1899

5.8 GHz Integrated Wireless Tube Housing

AvaLAN 5.8 GHz AW5800mTR radio inside a Videoalarm™ ACH313HBWM outdoor tube housing for PTZ cameras.

- Rugged extruded aluminum housing works with most IP-ready video cameras and is designed for those situations where pan and tilt is not needed.
- Includes a matching pre-configured AvaLAN outdoor radio (AW5800xTR) to complete the wireless link to the host network.
- 24 VDC power (120 VAC transformer included)
- Heater/blower in housing provides -20°F to 120°F operation.
- Small omnidirectional antennas are included or use optional 23 dBi AW23-5800 panel antenna for greater range.

Antennas for every situation, compatible with AvaLAN radios and offered at very reasonable prices.

Antennas

900 MHz

	Model Number	Description	Suggested Retail Price
	AW2-900	900 MHz Omnidirectional 2.5 dBi Antenna • 2.5 dBi gain perpendicular to antenna • Rubber-coated and flexible • Swivel mount	$19
	AW3x-900	900 MHz Omnidirectional 3 dBi Armored Antenna • 3 dBi gain in horizontal plane • Vandal-resistant • Armored • Flush mounted	$123
	AW5M-900	900 MHz Omnidirectional 5 dBi Magnetic Antenna • Magnetic mount for vehicles • Flexible wire with coil spring • 6 foot RF cable attached	$68
	AW5P-900	900 MHz Omnidirectional 5 dBi Pole Antenna • Designed for point-to-multipoint base station use (the access point) • 5 dBi gain perpendicular to antenna • 24” tall, pole mount bracket, 4’ RF cable	$150
	AW10-900	900 MHz Directional 10 dBi Panel Antenna • Weatherproof and rugged • 10 dBi gain • 13” square by 2” thick • Includes pole mount bracket and 4’ RF cable	$152
	AW11-900	900 MHz Directional 11 dBi Yagi Antenna • 11 dBi gain • 24” long by 12” high • Wall mount with 1’ RF cable	$94
	AW15-900	900 MHz Directional 15 dBi Yagi Antenna • 15 dBi gain • 39” long by 14” high • Wall mount with 1’ RF cable	$118

2.4 GHz

	Model Number	Description	Suggested Retail Price
	AW2-2400	2.4 GHz Omnidirectional 2 dBi Antenna • 2 dBi gain perpendicular to antenna • Rubber-coated and flexible • Swivel mount • 4” long (to swivel pivot)	$19
	AW19-2400	2.4 GHz Directional 19 dBi Panel Antenna • Weatherproof and rugged • 19 dBi gain perpendicular to panel • 13” square by 2” thick • Includes pole mount bracket and 4’ RF cable	$152

5.8 GHz

	Model Number	Description	Suggested Retail Price
	AW5-5800	5.8 GHz Omnidirectional 5 dBi Antenna • 5 dBi gain perpendicular to antenna • Rubber-coated and flexible • Swivel mount	$31
	AW23-5800	5.8 GHz Directional 23 dBi Panel Antenna • Weatherproof and rugged • 23 dBi gain perpendicular to panel • 13” square by 2” thick • Includes pole mount bracket and 4’ RF cable	$152

Here are some carefully selected accessories available from AvaLAN that are engineered to work with our radios and that allow you to adapt them to many different situations.

Accessories

Model Number	Description	MSRP
AW-RF4	900 MHz 4 FT Antenna Extension Cable • 4 ft length, low loss • FME female to inline RPTNC male	$40
AW-RF10	900 MHz 10 FT Antenna Extension Cable	$44
AW-RF25	900 MHz 25 FT Antenna Extension Cable	$55
AW-RF50	900 MHz 50 FT Antenna Extension Cable	$66
AW-APM	Yagi Pole Mount • Mounting adapter for AvaLAN Yagi antennas	$19
AW-XPM	Pole Mounting Plate • Kit for mounting xTR-series radios to a pole	$39
AW-MMB	Module Mounting Bracket • Bracket for mTR-series modules	$19
AW-MMB-DIN	DIN Rail Module Mount • Bracket to attach mTR-series modules to DIN Rail	$24
AW-LA	Lightning Arrestor • RPTNC In-line lightning arrestor to protect radio	$68
AW-12VA	Auto Adapter • 12 VDC to 5 VDC switching power converter for operating radios in vehicles	$39
AW-24VC	AC to DC Power Converter • 24 VAC to 12 VDC converter for AvaLAN radios	$45
AW-P8	Antenna to Radio Connector • 8” pigtail cable to connect RPTNC antenna to RPSMA radio module (use with RF Modules)	$16
AW-6VPS	6 Volt Power Supply • Wall hanging 120 VAC to 6 VDC 500 mA power supply	$10
AW-12VPS	12 Volt Power Supply • Wall hanging 120 VAC to 12 VDC 200 mA power supply	$10

Model Number	Description	MSRP
AW-POE	Power Over Ethernet Injector • Combines power via P5 jack with Ethernet data allowing a single cable connection to the radio module	$16
AW-POE18i	POE with Integrated Power Supply • 100-240 VAC 50/60 Hz to 18 VDC switching power supply integrated with Power Over Ethernet Injector	$45
AW-E4	Strain Relieved Ethernet Pass Through • RJ-45 weatherproof bulkhead mount jack to RJ-45 plug pigtail cable (use with RF Modules)	$16
AW-POE-USB	USB Power/Ethernet Cable • Cable with USB and RJ-45 plugs on one end and power-injected RJ-45 on the other. Allows powering AvaLAN radios and spectrum analyzers from laptop.	$49

Add another two years of limited warranty coverage for your AvaLAN radio for a very reasonable cost and provide a predictable annual maintenance expense.

Extended Warranty

Model Number	Description	MSRP
AW-Warranty-900	Extended Warranty for AW900 Series • Two year extension to free one year coverage • Overnight product replacement in continental USA	$65
AW-Warranty-2400	Extended Warranty for AW2400 Series • Two year extension to free one year coverage • Overnight product replacement in continental USA	$65
AW-Warranty-5800	Extended Warranty for AW5800 Series • Two year extension to free one year coverage • Overnight product replacement in continental USA	$75

About AvaLAN

Founded in the heart of California's high-tech Silicon Valley in 2004, AvaLAN Wireless ("AvaLAN") is an industry leading developer and manufacturer of long range industrial wireless radio technology. AvaLAN's products are designed to enable affordable wireless connections in perimeter or remote locations.

AvaLAN has grown each year since inception and has shipped over 30,000 radios to the networking, surveillance, digital signage, robotics, industrial automation and access control markets. AvaLAN's innovation continues to be concentrated on delivering robust and reliable connections to devices at the network's edge. AvaLAN's products have been implemented in some of the industry's most demanding environments including high interference indoor applications and long distance outdoor applications with range up to 30 miles. Specializing in the unlicensed 900MHz, 2.4GHz and 5.8GHz radio spectra, AvaLAN offers a number of Ethernet bridge products and point to multi point wireless networking products.

In 2009, AvaLAN encapsulated their technology into an easy to integrate radio module and is now developing OEM partners in addition to our distribution, dealer, and system integrator channels. AvaLAN's products offer the ideal combination of price, data rate, security, interference avoidance, quality-of-service, and ease-of use that professional installers demand.

AvaLAN in 2010 will continue to expand our line of robust and reliable wireless products with new modules for easy integration and further expansion of solutions for smart city applications.

AvaLAN Wireless Systems, Inc. is headquartered in Madison, Alabama, with remote offices in California Missouri and Canada.

To contact the AvaLAN Wireless team:

Sales: (866) 533-6216, sales@avalanwireless.com
Technical support: (650) 384-0000, support@avalanwireless.com
Customer service: (650) 641-3011, service@avalanwireless.com
Fax: (650) 249-3591

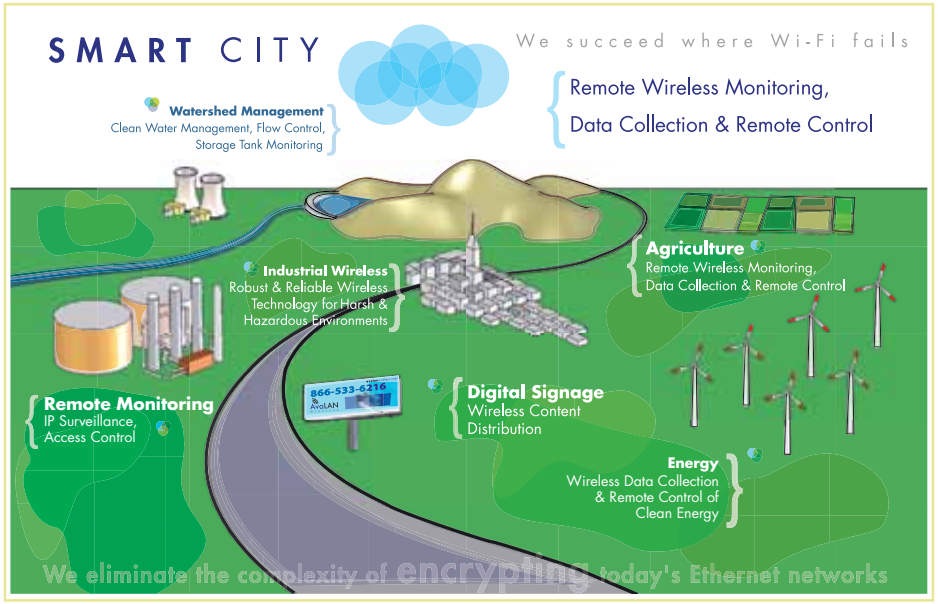
Mail:

AvaLAN Wireless Systems, Inc.
125A Castle Drive
Madison, AL 35758

Thank you for considering AvaLAN Wireless, and we invite you to visit our website at www.avalanwireless.com for more information

Matt Nelson, CEO

Mike Derby, Founder



Wireless Network Technologies: One Size Does Not Fit All Applications

All wireless solutions have certain advantages and disadvantages, so what are the most important considerations that will insure your wireless network's success? Here are three of the keys to being successful with your wireless digital signage network. First, making the system robust and reliable both initially and in the future could be the difference between success and failure. Have you ever wondered why information technology (IT) managers spend more money for "commercial grade" routers and switches? The answer is the high cost of network downtime and of on-going maintenance, even though these costs are difficult to measure. Second, your network needs to be secure. Wired or wireless networks that display public advertising and information need their content secured, controlled and verified. Third, consider the cost of the wireless network. Cost considerations need to include both the initial capital/installation cost and any recurring service or maintenance fees. Look to AvaLAN Wireless to address your questions and customer needs. AvaLAN's products offer the ideal combination of price, penetrating range, data rate, security, interference avoidance, Quality of Service, and ease-of-use.

Why use 900 MHz? Lower frequency radio waves have greater through wall penetration and 900MHz is ideal for non-line-of-sight wireless connections. High RF power combined with 12 operating channels makes for a very robust and reliable combination that is found the AvaLAN wireless 900MHz product line.

Why use 2.4 GHz? The most globally accepted unlicensed frequency; 2.4GHz offers a universal band for operating wireless industrial devices. AvaLAN's unique, secure, robust 2.4GHz solution offers over 30 operating channels which enable the AvaLAN product flexibility not found in other products. AvaLAN products are an ideal replacement for installations where WiFi systems are under-performing or failing completely due to insufficient range, excessive interference or unsatisfactory reliability.

Why use 4.9GHz? Ideal for public safety applications, "Licensed" 4.9 GHz wireless is an excellent frequency for line-of-sight police, fire, and other local municipal network communications. AvaLAN offer a point-to-point solution with higher data rate up to 5 Mbps and is ideally positioned to support IP-based megapixel surveillance cameras. With the expansion of smart city technologies on the rise, AvaLAN's new 4.9Ghz radio will allow local and state agencies a safe and secure network connection.

Why use 5.8 GHz? Offering higher data rate and line-of-sight communications 5.8GHz has over 21 non-overlapping channels for operation. This frequency is ideally suited for long range wireless backhaul and with higher data rate is also positioned to address the needs of higher bandwidth IP-based megapixel surveillance cameras.