



# Industrial Wireless Systems

## Wireless Measuring & Monitoring that Puts You in Control

Meriam Wireless offers a rugged and reliable way to easily implement wireless technology for measurement applications. The fully integrated wireless systems provide true "Out of the Box" installation and require no programming or special set up.

## MERIAM WIRELESS ADVANTAGES

- APPROVED for Class I, Division 1 and Class general purpose environments.
- 900 MHz Frequency Hopping Spread Spectrum bandwidth transmits at 1 full watt.
- License free bandwidth. FCC license not needed.
- Battery life - Up to 5 years Selectable transmit power from 1 Watt to 1 mW to conserve battery life.
- Available in analog and discrete I/O.
- Transmitters available as Battery, AC or DC powered.

**Take more frequent, accurate measurements** from a central, safe location. Data transmission frequency can be configured to fit your operational requirements allowing for more frequent measurements in areas prone to more problems. Meriam Wireless systems assist in maximizing uptime by sensing where problems are just beginning, before they become costly shutdowns. The Meriam Wireless System utilizes license-free Frequency Hopping Spread Spectrum (FHSS) technology to protect data integrity with a highly secure and accurate signal.

## Performance Features

- Rugged Design
- Flexible Power Options
- 1 Full Watt Transmit Power
- Transmit Data up to 3000 ft.
- Simple Installation
- Self Contained and Fully Integrated

**Contact**  
Meriam Wireless  
**216-928-2225**  
[www.meriam.com](http://www.meriam.com)

## An **Innovative Combination** of Rugged Design and Accuracy for Hazardous and Industrial Areas:

- Tank levels
- Power Generation
- Pipelines
- Chemical Processing
- Compressor Stations
- Process Control
- Flow Monitoring



# Meriam Wireless

## Wireless Instrumentation Enclosures



### Division 1 Explosion-proof Ethernet Access Point

The AW-XAP series explosion-proof access point systems were designed to house WLAN access points, routers and bridges to extend 802.11b/g network coverage into hazardous Division 1 locations where potentially explosive substances are present under normal operating conditions. The AW-XAP consists of two Meriam Wireless AW-CTB-2400 2.4 GHz Division 1 antennas mounted atop an Adalet explosion-proof enclosure allowing users to use the WLAN access point of choice in a Class I, Division 1 area. A second version utilizing the Meriam Wireless glass dome allows for the mounting of stock whip antennas within the protection of the rugged domed glass design. The enclosure system carries third party approvals from UL and also carries the ATEX certification when specified.

**AW-XAP-CTB • Div. 1 Access Point System w/ Div. 1 Antennas**

**AW-XAP-XJANT • Div. 1 Access Point System w/ Glass Domes for Standard Antennas**



### OEM Division 1 Explosion-proof Enclosure

The XJANT wireless instrumentation enclosure was designed to house the Meriam Wireless OEM wireless transmitter for use with existing OEM sensors and instrumentation. The XJANT with the AWJA / AWJD transmitter can be customized with a customer's unique logo or special paint color and can be ordered with a variety of conduit hub configurations and sizes.

**XJANT • Meriam Wireless OEM Div. 1 Wireless Instrumentation Enclosure**



### Fiberglass Enclosure

This fiberglass enclosure is modified to mount wireless DIN rail devices. Durable molded fiberglass reinforced polyester construction with stainless steel latches. Enclosure includes extension cable with reverse polarity SMA bulkhead fitting and standard 35mm DIN rail for mounting wireless device. This enclosure can be used to protect wireless DIN rail mount device from harsh or corrosive environments for applications indoors as well as outdoors.

**Z7820 • Fiberglass Enclosure**

# Meriam Wireless

## Wireless Systems/Modems/Transceivers



### Division 1 Explosion-proof Wireless System

Meriam Wireless point-to-point systems operate at a 900 MHz Frequency Hopping Spread Spectrum Bandwidth. The explosion-proof wireless systems includes transmitter and DIN rail mount receiver. Our explosion-proof transmitter is housed inside a dual-sided Adalet Class I, Division 1 instrument enclosure suitable for hazardous locations where potentially explosive substances are present under normal operating conditions. Each point-to-point system is able to transmitter one 4 to 20 mA analog signal with two dry contact discrete I/O's.

**ZW17311 • Class I, Division 1 Battery Powered Wireless Transmitter with DIN Rail Receiver**

**ZW17211 • Class I, Division 1 AC Powered Wireless Transmitter with DIN Rail Receiver**

**ZW17011 • Class I, Division 1 DC Powered Wireless Transmitter with DIN Rail Receiver**



### DIN Rail Mount Wireless System

Meriam Wireless point-to-point systems come with a 900 MHz Frequency Hopping Spread Spectrum DIN rail mount wireless transmitter and DIN rail mount receiver. Each DIN rail wireless point-to-point system is able to transmitter one 4 to 20 mA analog signal with two dry contact discrete I/O's.

**ZW11111 • Battery Powered DIN Rail Mount Wireless System**

**ZW10011 • DC Powered DIN Rail Mount Wireless System**



### Division 1 Explosion-proof Wireless RS-232 / 422 / 485 Modem

A Meriam/Adalet Wireless RF modem housed in an Adalet Class I, Division 1 instrument enclosure suitable for use in hazardous Division 1 locations where potentially explosive substances are present under normal operating conditions. The wireless RF modem is housed in a dual chamber Class I, Division 1 explosion-proof instrument enclosure, power supply, cables and fittings. Accessories included: quick start guide, configuration software, 2.1dB gain antenna, (1) serial loopback adapter, (1) null modem adapter (male to male), (1) Male RS-232 / 422 / 485 adapter, (1) female RS-232/422/485 adapter, (1) DB-9 to DB-9 female serial cable, and (1) 9V 1A power adapter.

**AWB – S – X • Panel Mount RS-232 / 485 Transceiver**

**AWB – U – X • Panel Mount USB w/ Accessories**



### Panel Mount RS-232 / 485 Transceiver

For use in general purpose or industrial operations, the AWB serial bridge system consists of stand alone panel mount modem transceivers. The AWB modem is panel mountable for fast, screw in installation in a control cabinet or location of choice. The modem is factory or field programmable for RS-232 / 422 / 485 as well as update interval and transmit power. All programming values must be specified at time of quotation. Accessories include: quick start guide, configuration software, 2.1 dB gain dipole antenna, (1) serial loopback adapter, (1) null modem adapter (male to male), (1) Male RS-232 / 422 / 485 adapter, (1) female RS-232/422/485 adapter, (1) DB-9 to DB-9 female serial cable, and (1) 9V 1A power adapter.

**AWB – S • Panel Mount RS-232 / 485 Transceiver w/ Accessories**

**AWB – U • Panel Mount USB w/ Accessories**

## Accessories

### Power Options and Power Supplies



AW-SDP4-24-100T

AW-SDP2-24-100T



AWT-BAT

**AW-SDP2-24-100T • Class I Division 2, 50 Watt DC Power Supply**

**AW-SDP4-24-100T • Class I Division 2,100 Watt DC Power Supply**

**AWT-BAT • Replacement battery for battery powered transmitters, Size 'D' Lithium Battery (batteries individually sold)**

## Antennas



Z7594-5



Z7594-1



**Z7594-5 / AW-YAGI • AW-Yagi 4 Element Yagi Antenna with 8.1 dBi Gain  
(Includes mounting brackets)**

**Z7594-1 / AW-Omni • Omni Directional Antenna with 5.1 dBi Gain  
(Includes mounting brackets)**

**Recommended mating cables to connect dipole devices  
with Omni Directional & Yagi Antennas**

<b>RG58-RSP-NP-B</b>	RG 58 RPSMA plug to Type N plug 12 inch cable
<b>RG58-RSP-NP-C</b>	RG 58 RPSMA plug to Type N plug 24 inch cable
<b>RG58-RSP-NP-D</b>	RG 58 RPSMA plug to Type N plug 60 inch cable
<b>RG58-RSP-NP-E</b>	RG 58 RPSMA plug to Type N plug 120 inch cable
<b>RG58-RSP-NP-F</b>	RG 58 RPSMA plug to Type N plug 240 inch cable

**Z7594-2 / AW-CTB-800TF • Class I Division 1 Omni-Direction Antenna Dual Band  
824-896 MHz & 1850-1990 MHz**

**Z7594-3 / AW-CTB-900TF • Class I Division 1 Omni-Direction Antenna 900MHz  
(For use with Adalet Wireless Systems Only)**

**Recommended mating cables to connect dipole devices with  
800 & 900 MHz Explosion Proof Antennas**

<b>RG174-RSP-TP-A</b>	RG 174 RPSMA plug toTNC Type connector 6 inch cable
<b>RG174-RSP-TP-B</b>	RG 174 RPSMA plug toTNC Type connector 12 inch cable
<b>RG174-RSP-TP-C</b>	RG 174 RPSMA plug toTNC Type connector 24 inch cable
<b>RG174-RSP-TP-D</b>	RG 174 RPSMA plug toTNC Type connector 60 inch cable
<b>RG174-RSP-TP-E</b>	RG 174 RPSMA plug toTNC Type connector 120 inch cable
<b>RG174-RSP-TP-F</b>	RG 174 RPSMA plug toTNC Type connector 240 inch cable

**Z7594-4 / AW-CTB-2400TF • Class I Division 1 Omni-Direction Antenna 2.4 GHz**

**Recommended mating cables to connect 2.4 GHz router with 2.4 GHz Antenna**

<b>RG58-RTP-RTP-A</b>	RG 58 Reverse TNC Type Connector to Reverse TNC Type Connector 6 inch cable
<b>RG58-RTP-RTP-B</b>	RG 58 Reverse TNC Type Connector to Reverse TNC Type Connector 12 inch cable
<b>RG58-RTP-RTP-C</b>	RG 58 Reverse TNC Type Connector to Reverse TNC Type Connector 24 inch cable
<b>RG58-RTP-RTP-D</b>	RG 58 Reverse TNC Type Connector to Reverse TNC Type Connector 60 inch cable
<b>RG58-RTP-RTP-E</b>	RG 58 Reverse TNC Type Connector to Reverse TNC Type Connector 120 inch cable
<b>RG58-RTP-RTP-F</b>	RG 58 Reverse TNC Type Connector to Reverse TNC Type Connector 240 inch cable