



Safety Guidelines and Warnings for Hazardous Location Installations

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Installation Warning and Caution Statements for Hazardous Locations Environments



Warning**Statement 1071—Warning Definition****IMPORTANT SAFETY INSTRUCTIONS**

Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Read the installation instructions before using, installing, or connecting the system to the power source. Use the statement number at the beginning of each warning statement to locate its translation in the translated safety warnings for this device.

SAVE THESE INSTRUCTIONS

Warning**Statement 1017—Restricted Area**

This unit is intended for installation in restricted access areas. Only skilled, instructed, or qualified personnel can access a restricted access area.

**Warning****Statement 1022—Disconnect Device**

To reduce the risk of electric shock and fire, a readily accessible disconnect device must be incorporated in the fixed wiring.

**Warning****Statement 9001—Product Disposal**

Ultimate disposal of this product should be handled according to all national laws and regulations.

**Warning****Statement 1046—Installing or Replacing the Unit**

To reduce risk of electric shock, when installing or replacing the unit, the ground connection must always be made first and disconnected last.

If your unit has modules, secure them with the provided screws.

**Warning****Statement 1062—Remove Power Before Disconnecting**

Explosion Hazard—Do not connect or disconnect any connector to this equipment unless power has been removed or you have verified that the area is nonhazardous. Secure any external connections that connect to this equipment by using screws, sliding latches, threaded connectors, or other means provided with this product.

**Warning****Statement 1074—Comply with Local and National Electrical Codes**

To reduce risk of electric shock or fire, installation of the equipment must comply with local and national electrical codes.

**Warning**

If you connect or disconnect the console cable with power applied to the unit or any device on the network, an electrical arc can occur. This could cause an explosion in hazardous location installations. Be sure that power is removed or the area is nonhazardous before proceeding.

**Caution**

This equipment is suitable for use in Class I, Division 2, Groups A, B, C, D or non-hazardous locations.

For safety and to achieve a good installation, please read and follow these safety precautions:

- Cisco Catalyst IW9167E Heavy Duty Access Points are only intended to be installed vertically with antennas facing up. Any other mounting orientation will compromise the IP66/67 and type 4X ingress ratings required for safety and hazardous locations compliance.
- Select your installation site with safety and performance in mind. Remember: electric power lines and phone lines look alike. For safety, assume that any overhead line can kill.

- Call your electric power company. Tell them your plans, and ask them to look at your proposed installation.
- Plan your installation carefully and completely before you begin. Successful raising of a mast or tower is largely a matter of coordination. Each person should be assigned to a specific task and should know what to do and when to do it. One person should be in charge of the operation to issue instructions and watch for signs of trouble.
- When installing the access point and antennas, remember:
 - Do not use a metal ladder.
 - Do not work on a wet or windy day.
 - Do dress properly—shoes with rubber soles and heels, rubber gloves, long sleeved shirt or jacket.
- Use a rope to lift the access point. If the assembly starts to drop, get away from it and let it fall.
- If any part of the antenna system should come in contact with a power line, do not touch it or try to remove it yourself. Call your local power company. They will remove it safely.

If an accident should occur, call for qualified emergency help immediately.

Additional Considerations Before Installation

This section describes special considerations for preparing the Catalyst IW9167EH-HZ access point for installation in Class I, Division 2/Zone 2 hazardous locations.



Note This document does not provide specific procedures for installing conduit. You must ensure that your installation techniques and procedures comply with Class I, Division 2/Zone 2 hazardous location installation regulations for your geographic location.



Note Do not thread 3/4" NPT conduit into the Catalyst IW9167EH-HZ model's I/O ports..

Loctite 565 Thread Sealant needs to be applied to the threads prior to the installation. You should supply certified 1/2" NPT conduit, gland, or adapter for each port used for appropriate installation. (For example, Sealcon provides glands and adapters that are certified. See <https://www.sealconex.com/?ex=9wkuir-fln65y-13897wy-drrs7y>.)

Avoidance of Electrostatic Discharge

In order to prevent an electro static discharge within a hazardous location, only touch with an insulating object or use means to continuously drain off electrostatic charges in the installation.

Performing Maintenance

The access point requires minimal periodic or preventive maintenance as it has no moving parts, filters, lubricants, or mechanical contact components. However, when installed in a hazardous location, periodic inspections should be conducted in order to ensure that the access point is operating satisfactory. This section provides information about performing maintenance on an access point installed in a hazardous location.

Removing the Access Point from Service

When removing an access point from service, make sure you remove power from the access point before opening the cover and disconnecting the power input wiring. When removing the AC wiring, remember that the ground connection should be the last to be disconnected.

Conducting Periodic Inspections

The access point should be inspected periodically to ensure normal and airtight operation in the hazardous location environment.

Inspection Routine	Periodicity
Inspect O-ring seals and exterior electrical connections for aging, corrosion, and low ground resistance.	Every 3 years
Inspect cover and liquid-tight adapter gaskets for airtightness.	Every 5 years

Hazardous Locations Standards and Marking Strings

Specific Conditions of Use

- Cable glands/Conduit shall be ATEX/IECEx certified to meet IP66//67 ratings. The service temperature of the entry for the Cable glands/Conduit is 80.2°C (176.36°F).
- In order to prevent an electrostatic discharge within a hazardous location, only touch with an insulating object or use means to continuously drain off electrostatic charges in the installation.
- The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.



Note Provision shall be made to provide that the circuits are limited to overvoltage category II as defined in IEC 60664-1.

- Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage value at the supply terminals to the equipment”.

- Provision to protect antennas from unintentional damage shall be provided to the device. Antenna caps must be installed when an antenna is not in use (maximum torque range: 6.2-9.7 in-lbs).
- Only LMR-240/LMR-400/LMR-600 Coaxial cables can be used and maximum allowable cable length of 150ft for the antennas.
- Only specific antennas are allowed to be use with the access point equipment. See installation instruction for application of antennas with the access point equipment.
- Mounted position shall be in vertical position with power inlet facing downward.

The following standards were used for the hazardous locations approvals and certifications:
UL 121201, Ed. 9
CSA C22.2 No. 213, Ed. 3
CAN/CSA C22.2 No. 60079-0:19, 4th Ed
CAN/CSA C22.2 No. 60079-7, 2nd Edition, AMD 1
CAN/CSA C22.2 No. 60079-11, 2nd Ed,
CAN/CSA-C22.2 NO. 60079-31:15
EN IEC 60079-0:2018
EN 60079-7: 2015+A1:2018
EN 60079-11:2012
EN 60079-31:2014
UL 60079-0, 7th Edition
UL 60079-7, 5th Edition
UL 60079-11, Edition 6
UL 60079-31, 2nd Edition,
IEC 60079-0, Edition 7
IEC 60079-7, Edition 5.1
IEC 60079-11, Edition 6
IEC 60079-31, Edition 3
GB 3836.1-2010
GB 3836.3-2010
GB 3836.4-2010
GB 3836.9-2014

The following hazardous locations marking strings are provided on Catalyst IW9167EH-HZ models

Class I, Division 2, Groups A, B, C and D

Class I, Zone 2, AEx ic ec IIC T4 Gc

Zone 22 AEx ic tc IIIC T90°C Dc



II 3G Ex ic ec IIC T4 Gc

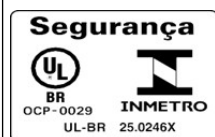


II 3D Ex ic tc IIIC T90°C Dc

Ex ic ec IIC T4 Gc Ex ic tc IIIC T90°C Dc

UL 24 ATEX 3310X

IECEX UL 24.0093X



25-KA4BO-0329X

25-KA4BO-0330X

25-KA4BO-0331X

25-KA4BO-0332X

