

Emerson Wireless 1410S Gateway



Safety messages

NOTICE

This guide provides basic guidelines for the Emerson Wireless 1410S Gateway. It does not provide instructions for diagnostics, maintenance, service, or troubleshooting. Refer to the Emerson Wireless Gateway 1410S Reference Manual for more information and instructions. The manuals and this guide are available electronically on Emerson.com/Rosemount.

⚠ WARNING

Explosion hazard

Do not make or break any connections to the Gateway while circuits are live unless area is known to be non-hazardous.

Explosions could result in death or serious injury

Installation of device in an explosive environment must be in accordance with appropriate local, national, and international standards, codes, and practices. Review the Product Certifications section for any restrictions associated with a safe installation.

Avoid contact with leads and terminals. High voltage that may be present on leads can cause electrical shock.

Potential electrostatic charging hazard.

The Gateway enclosure is aluminum. Use care in handling and cleaning when in explosive environments to avoid an electrostatic discharge.

Repair/maintenance

If the device is not functioning under the manufactured specified operations, see the troubleshooting guide in the Emerson Gateway manual. If these troubleshooting options are not sufficient, contact the factory.

Physical access

Unauthorized personnel may potentially cause significant damage to and/or misconfiguration of end users' equipment. This could be intentional or unintentional and needs to be protected against.

Physical security is an important part of any security program and fundamental to protecting your system. Restrict physical access by unauthorized personnel to protect end users' assets. This is true for all systems used within the facility.

⚠ CAUTION

Equipment conformance

Protection may be impaired if the device is used in a manner not specified by the manufacturer.

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1 Wireless planning

1.1 Power up sequence

The Gateway should be installed and functioning properly before power modules are installed in any wireless field devices. Wireless field devices should also be powered up in order of proximity from the Gateway beginning with the closest. This will result in a simpler and faster network installation.

1.2 Gateway redundancy

If the wireless Gateway was ordered with redundancy (Gateway Redundancy code RD), refer to Appendix D in the Emerson Wireless Gateway Reference [Manual](#) for additional installation instructions.

2 PC requirements

2.1 Operating system (optional software only)

For security setup, Microsoft® supported Windows™ operating systems are acceptable. Some examples are shown below:

- Microsoft Windows Server 2019 (Standard Edition), Service Pack 2
- Windows 10 Enterprise, Service Pack 1

2.2 Applications

Configuration of the Gateway is done through a secure web interface. Recent versions of the following browsers are supported:

- Chrome™ browser
- Mozilla Firefox®
- Microsoft Edge

2.3 Hard disk space

- AMS Wireless Configurator: 1.5 GB
- Gateway Setup CD: 250 MB

3 Initial connection and configuration

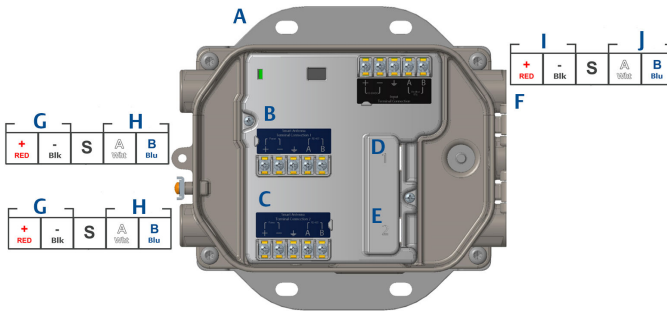
To configure the Gateway, a local connection between a computer and the Gateway needs to be established.

Powering the Gateway

For the Emerson 1410S, bench top power will be needed to power the Gateway by wiring a 10.5–30 VDC (24 VDC if configured with I.S. isolators) power source.

An Emerson 1410S Gateway powered with PoE operates in a voltage range of 44-57V. It is controlled by the 802.3af standard

Figure 3-1: Emerson 1410S Gateway Wiring



- A. Mounting plate
- B. Antenna terminal 1 power and data connections
- C. Antenna terminal 2 power and data connections
- D. Ethernet port 1. When this port is activated, the factory IP address is 192.168.1.10.
- E. Ethernet port 2. When this port is activated, the factory IP address is 192.168.2.10.
- F. Emerson 1410S power and serial connections
- G. Power output
- H. RS-485 comm
- I. 10.5 to 30 VDC power input
- J. Serial modbus

⚠ WARNING**Conduit/cable entries**

The conduit/cable entries in the transmitter housing use a ½–14 NPT thread form. When installing in a hazardous location, use only appropriately listed or Ex certified plugs, glands, or adapters in cable/conduit entries.

Installer to ensure external conduit/cable fittings are Type 4X rated or better (C22.2 No 94.2/UL 50E requirement).

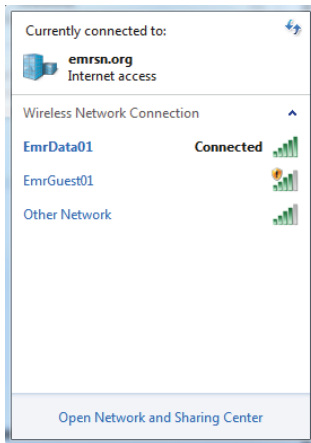
3.1 Establishing a connection

Connect the PC/laptop to the Ethernet 1 (Primary) receptacle on the Gateway using an Ethernet cable.

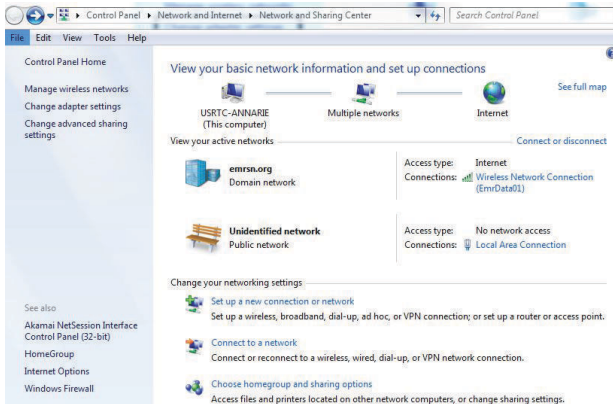
3.2 Windows 7

Procedure

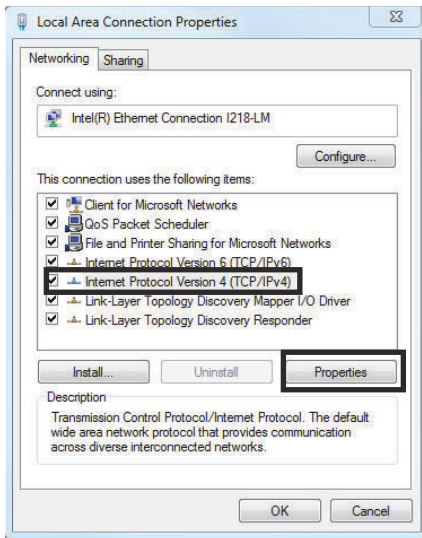
1. Click the **Internet Access icon** on the bottom right of the screen.



2. Select the **Network and Sharing Center**.
3. Select **Local Area Connection**.



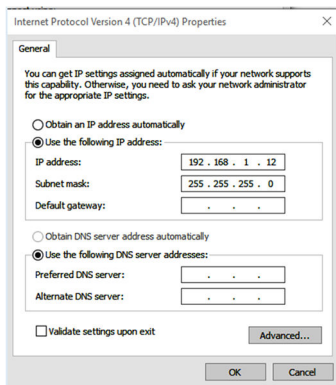
- 4. Select **Properties**.
- 5. Select **Internet Protocol Version 4 (TCP/IPv4)** → **Properties**.



Note

If the PC/laptop is from another network, record the current IP address and other settings so the PC/laptop can be returned to the original network after the Gateway has been configured.

- 6. Select the **Use the following IP address** button.

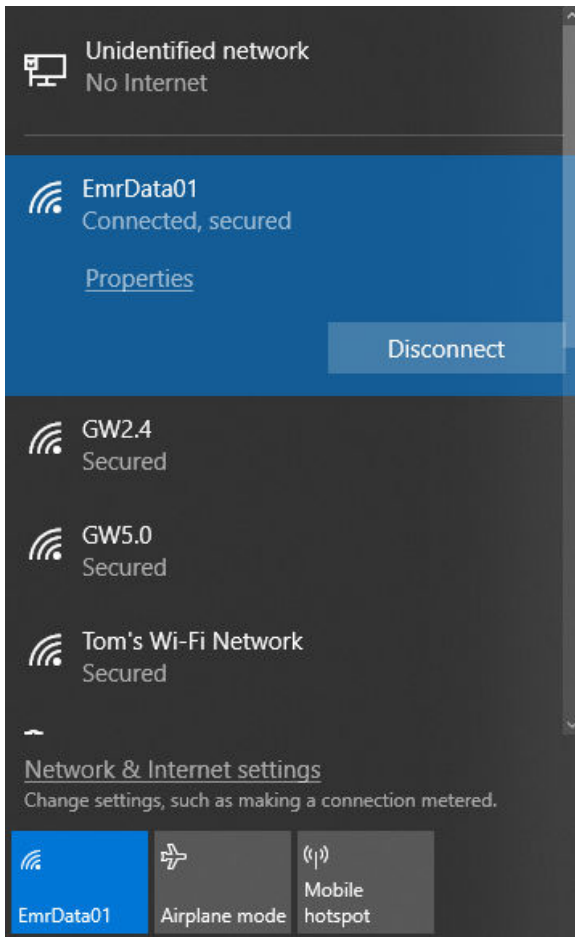


7. In the **IP address** field, enter 192.168.1.12 (DeltaV Ready enter 10.5.255.12).
8. In the **Subnet mask** field, enter 255.255.255.0.
9. Select **OK** for both the **Internet Protocol (TCP/IP) Properties** window and the **Local Area Connection Properties** window.

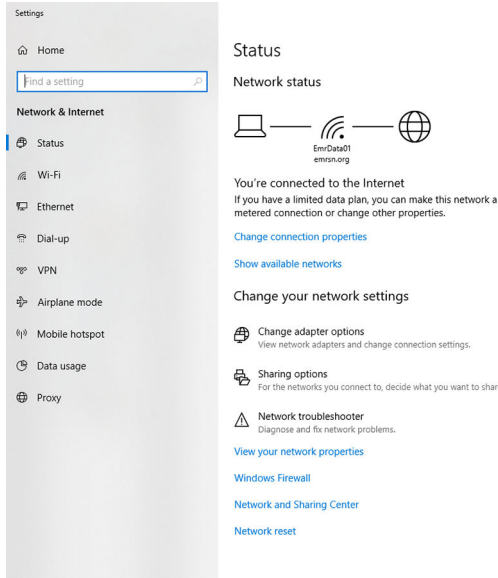
3.3 Windows 10

Procedure

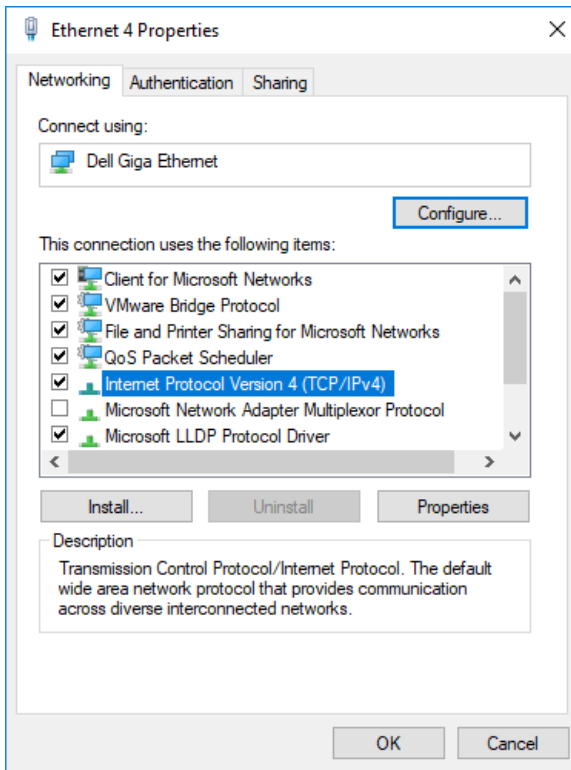
1. Select the network icon in the lower right corner.
2. Select the **Network settings** link.



3. Select **Change adapter options**.



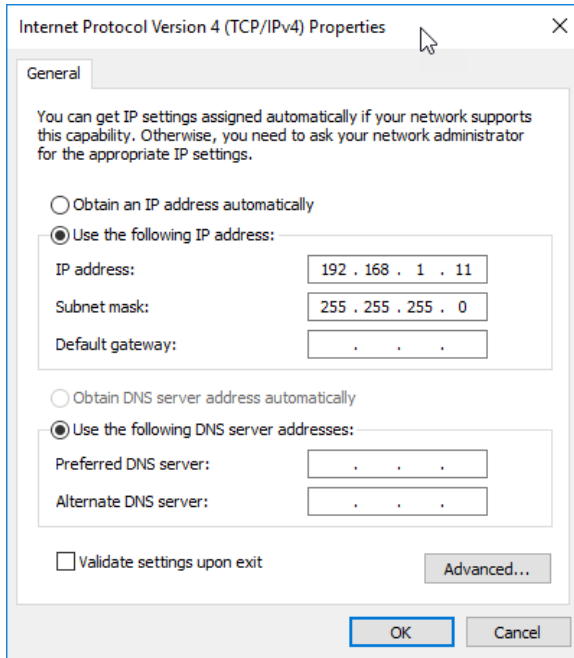
4. Right click the network interface connection that the Gateway is plugged into, and select **Properties**.
5. Select **Internet Protocol Version 4 (TCP/IPv4)** → **Properties**.



Note

If the PC/laptop is from another network, record the current IP address and other settings so the PC/laptop can be returned to the original network after the Gateway has been configured.

6. Select the **Use the following IP address** button.



7. In the **IP address** field, enter 192.168.1.11 (DeltaV Ready enter 10.5.255.12).
8. In the **Subnet mask** field, enter 255.255.255.0.
9. Select OK for both the **Internet Protocol (TCP/IP) Properties** window and the **Local Area Connection Properties** window.

Note

Connecting to the Gateway's secondary Ethernet port will require different network settings.

Table 3-1: Network Settings

Ethernet	Gateway	PC/laptop/ tablet	Subnet
1	192.168.1.10	192.168.1.11	255.255.255.0
2	192.168.2.10		

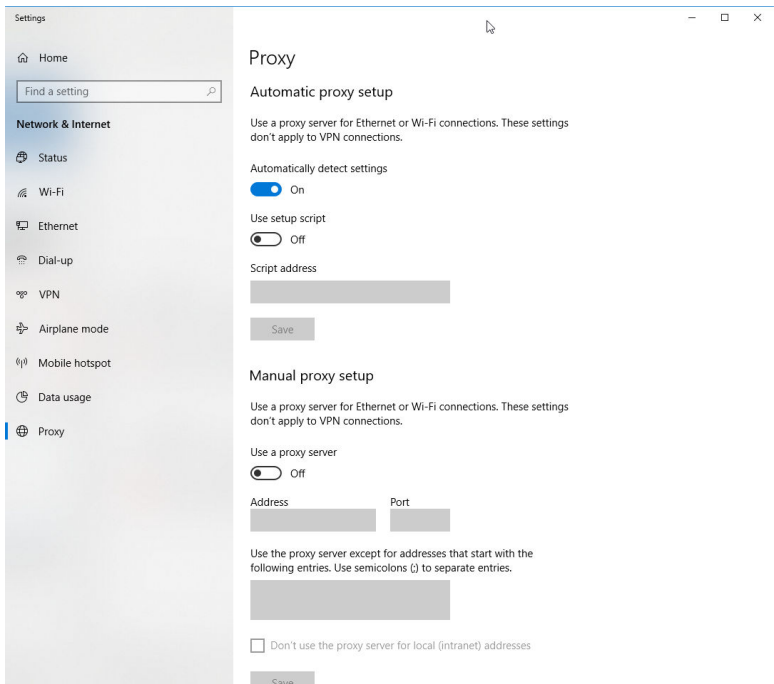
3.4 Disable proxies

This procedure may be necessary when using a Chrome browser with Windows operating systems.

Procedure

1. Open web browser.
2. Navigate *Settings >Advanced*.
3. In the System section, click **Open proxy settings**.

Example



3.5 Configure the Gateway

To complete initial configuration for the Gateway, follow the steps below. This will have to be done be done for both networks.

Procedure

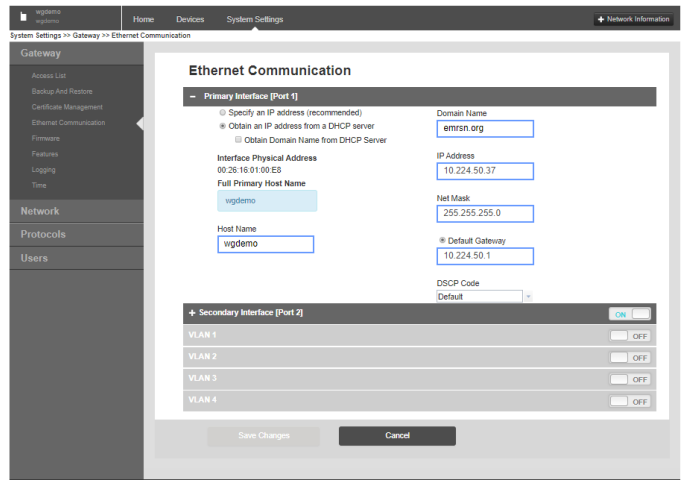
1. Access the default web page for the Gateway at <https://192.168.1.10>.
 - a) Log on as Username: **admin**
 - b) Type in password: **default**

Figure 3-2: User Name and Password



2. Navigate to *System Settings > Gateway > Ethernet Communication* to enter the Network Settings.
 - a) Configure a static IP Address or set for DHCP and enter a Hostname.

Figure 3-3: Ethernet Communication



- b) Restart application at *System Settings > Gateway > Backup and Restore > Restart Apps*.

Note

Resetting applications will temporarily disable communications with field devices.

3. Disconnect the power and Ethernet cable from the Gateway.

4 Physical installation

4.1 Emerson 1410S2 mounting

Find a location where the Gateway has convenient access to the host system network (process control network).

4.1.1 Pipe mount

Prerequisites

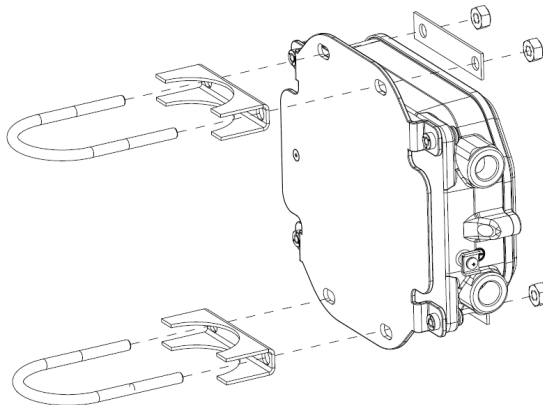
The following hardware and tools are needed to mount the Gateway to a 20-in. pipe:

- Two 5/16-in. u-bolts (supplied with Gateway)
- 2-in. mounting pipe
- 1/2-in. socket-head wrench

Procedure

1. Insert one u-bolt around the pipe, through the top mounting holes of the Gateway mounting bracket, and through the washer plate.
2. Use a 1/2-in. socket-head wrench to fasten the nuts to the u-bolt.
3. Repeat for the second u-bolt and the lower mounting holes.

Figure 4-1: Emerson 1410S2 Mounting



4.1.2 Bracket mount

The following hardware and tools are needed to mount the Gateway to a support bracket:

Prerequisites

- Four 15/16-in. bolts
- Mounting support bracket
- $\frac{3}{8}$ -in. drill
- $\frac{1}{2}$ -in. socket-head wrench

Mount the Gateway using the following procedure:

Procedure

1. Drill four 3/8-in. (9,525 mm) holes spaced 3.06-in. (77 mm) apart horizontally and 11.15-in. (283 mm) apart vertically in the support bracket, corresponding with the holes on the Gateway mounting bracket.
2. Using a 1/2-in. socket-head wrench, attach the Gateway to the support bracket with four 15/16-in. bolts.

4.2 Connecting the Emerson 1410S with 781S Smart antennas

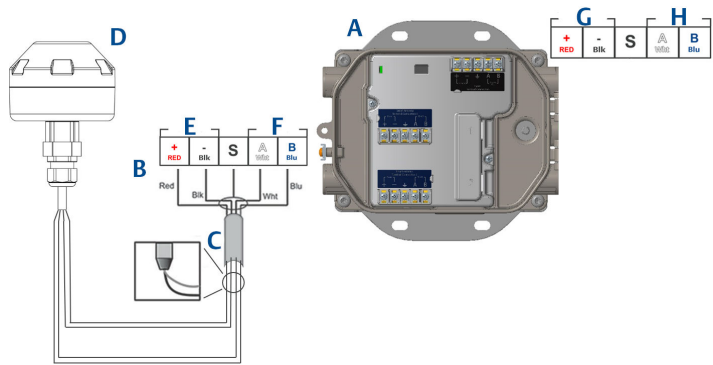
Prerequisites

The internal terminal connections on the shroud require 14AWG cable or smaller. The cable must be rated for an ambient temperature of 100°C. Terminal screws must be secured with a torque of 7in-lbs at installation and a max torque of 10in-lbs.

Procedure

1. Strip the insulation back a minimum of 0.14 inches.
2. Attach shield pair cable.
3. Tape back shield wire and foils.

Figure 4-2: Emerson 1410S and 781S Installation



- A. Emerson Wireless 1410S Gateway
- B. Terminal connections
- C. Shield pair cable
- D. Emerson Wireless 781S Smart Antenna
- E. Power output
- F. RS-485 comm
- G. 10.5 to 30 VDC power input
- H. Serial modbus

4.3 Emerson 1410S grounding

The Gateway enclosure case should always be grounded in accordance with national and local electrical codes. The most effective grounding method is a direct connection to earth ground with minimal impedance. Ground the Gateway by connecting the external grounding lug to earth ground. The external ground should be connected with a cable larger than 11AWG. The external ground screw should be installed with a torque of 7in-lbs. The connection should be 1Ω or less. The external ground plug is located on the left side of the Gateway enclosure and is identified by the following symbol:



4.4 Terminating resistors

Please reference the Emerson 1410S Gateway and 781S Smart Antenna Reference Manual for configuration of the DIP switches.

Three DIP switches are provided to enable termination and biasing resistors to the serial Modbus connection. The switches are found in the electronics housing located above the terminal connections. The three DIP switches are on the right side and the down position in ON.

4.5 Connect to the host system

Procedure

1. Wire the Gateway's Ethernet 1 (Primary) or Serial Output connection to the Host System Network or Serial I/O (see Figure 1 and Figure 2 for hardware drawings). This will have to be done for both networks. You can route the networks to different locations if necessary.
2. For serial connections, make sure all terminations are clean and secure to avoid wiring connection problems.

4.6 Best practice

Twisted shielded pair cable is generally used to wire the serial connection, and it is standard practice to ground the shield on the serial host side leaving the shield floating on the Gateway side. Insulate the shield to avoid grounding issues.

In accordance with Emerson *WirelessHART*[®] security guidelines (Emerson Wireless Security [Whitepaper](#)), the Gateway should be connected to the Host System via a LAN (Local Area Network) and not a WAN (Wide Area Network).

5 Software installation (optional)

5.1 Installation instructions

The 2-disk software pack contains the Security Setup Utility (only required for secure host connections or OPC communications) and AMS Wireless Configurator. The Security Setup Utility is located on Disk 1.

Procedure

1. Exit/close all Windows programs, including any running in the background, such as virus scan software.
2. Insert Disk 1 into the CD/DVD drive of the PC.
3. If the setup program does not appear, go into the disk's file and run **autorun.exe**.
4. Follow the prompts.
5. Insert Disk 2 into the CD/DVD drive of the PC.
6. Select **Install** from the menu when the AMS Wireless Configurator setup begins.
7. Follow the prompts.
8. Allow AMS Wireless Configurator to reboot PC.
9. Do not remove the disk from the CD/DVD drive.
10. Installation will resume automatically after login.
11. Follow the prompts.

Note

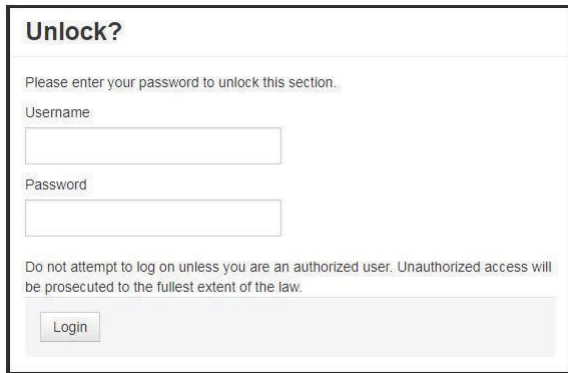
If the autorun function is disabled on the PC, or installation does not begin automatically, double click D:\SETUP.EXE (where D is the CD/DVD drive on the PC) and select **OK**.

For more information about the Security Setup Utility and AMS Wireless Configurator, see the Emerson 1410S Gateway and 781S Smart Antennas Reference Manual.

6 Verify operations

Operation is verified through the web interface by opening a web browser from any PC on the host system network and entering the Gateway IP address or DHCP host name in the address bar. If the Gateway has been connected and configured properly, the security alert will be displayed followed by the log in screen. This will need to be done for both networks.

Figure 6-1: Gateway Log In Screen



The screenshot shows a web interface titled "Unlock?". Below the title is a message: "Please enter your password to unlock this section.". There are two input fields: "Username" and "Password". Below the fields is a "Login" button. At the bottom, there is a warning: "Do not attempt to log on unless you are an authorized user. Unauthorized access will be prosecuted to the fullest extent of the law."

The Gateway is now ready to be integrated into the host system. Ensure the field devices to be used with each network have the Network ID and Join Key that is on the Gateway (found on the Network Setting page). Once the field devices are powered, they will appear on the wireless network and communications can be verified under the Explore tab using the web interface. The time needed for the network to form will depend on the number of devices.

7 Specifications

7.1 Emerson Wireless 1410S Gateway

Functional specifications

Power	<p>Intrinsically Safe Output Option A: 24 VDC</p> <p>Intrinsically Safe Output Option B or N: 10.5-30 VDC</p> <p>Any IS output option Powered via PoE: 44-57 VDC</p> <p>For best results, use a high quality industrial galvanically isolated power supply.</p> <p>Overtoltage Category I</p>
Current draw: Intrinsically Safe Output Option A	<p>Operating current draw is based on 7 Watts power consumption.</p>
Current draw: Intrinsically Safe Output Option B	<p>Operating current draw is based on 5 Watts power consumption.</p> <p>At start-up, the power supply must be capable of momentarily sourcing at least twice the operating current indicated in the figure below. The Gateway may draw significantly more current momentarily at start-up if not limited by the power supply.</p>
Power over Ethernet (PoE)	<p>Gateway supports IEEE 802.11 PoE as a Powered Device (PD) on either port.</p>
Environmental	<p>Operating temperature range:</p> <p>Intrinsically Safe Output Option A: -40 to 149 °F (-40 to 65 °C)</p> <p>Intrinsically Safe Output Option B: -40 to 149 °F (-40 to 65 °C)</p> <p>Pollution: degree 4</p> <p>Maximum altitude: 5,000 m</p>
Operating humidity range	<p>0 to 99 percent relative non condensing humidity</p>
Antenna options	<p>See 781S Smart Antenna.</p>

Performance specifications

EMC performance	<p>Meet all industrial environment requirements of EN61326. Maximum deviation less than one percent span during EMC disturbance.</p>
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Note

During surge event, device may exceed maximum EMC deviation limit or reset; however, device will self-recover and return to normal operation within specified start-up time. For best results, use a high quality industrial galvanically isolated power supply.

Vibration effect	No effect when tested per the requirements of IEC60770-1 (1999): High vibration level - field or pipeline (10 to 60 Hz 0.21 mm displacement peak amplitude/60 to 2000Hz 2g)
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7.1.1 Physical specifications

Weight	2.76 lb. (1.25 kg)
Housing size	6.25-in. x 8.8-in. x 2.5-in. (15.9 cm x 22.4 cm x 6.4 cm)
Housing	Low-copper aluminum
Paint	Polyurethane
Mounting style	Pole mount

8 Product certifications

Rev: 2.0

8.1 European Directive Information

A copy of the EU Declaration of Conformity can be found at the end of the Quick Start Guide. The most recent revision of the EU Declaration of Conformity can be found at Emerson.com.

8.2 Telecommunications compliance

All wireless devices require certification to ensure they adhere to regulations regarding the use of the RF spectrum. Nearly every country requires this type of product certification. Emerson is working with governmental agencies around the world to supply fully compliant products and remove the risk of violating country directives or laws governing wireless device usage.

8.3 Ordinary location certification

As standard, the transmitter has been examined and tested to determine that the design meets the basic electrical, mechanical, and fire protection requirements by a nationally recognized test laboratory (NRTL) as accredited by the Federal Occupational Safety and Health Administration (OSHA).

8.4 Installing equipment in North America

The US National Electrical Code® (NEC) and the Canadian Electrical Code (CEC) permit the use of Division marked equipment in Zones and Zone marked equipment in Divisions. The markings must be suitable for the area classification, gas, and temperature class. This information is clearly defined in the respective codes.

8.5 USA

N5 U.S.A. Division 2 with Intrinsically Safe Outputs

Certificate	80009647 (CSA)
Standards	UL 60079-0: 2019, UL 60079-7: 2017, UL 60079-11: 2014, UL 60079-15: 2013, UL 60079-31: 2015, FM 3600: 2011, FM 3610:2018, FM 3611:2004, FM 3616:2011, UL 61010-1-12 Ed 3
Markings with Intrinsically Safe into Division 1 or Zone 0	Class I, II, III, Division 2, Groups A, B, C, D, F, G; Intrinsically Safe outputs to Class I, Division 1, Groups A, B, C, D; Class I, Zone 2 AEx ec [ia Ga] IIC T4 Gc; Class I, Zone 2 AEx ec nA [ia Ga] IIC T4 Gc; Zone 22 AEx tc [ia Ga] IIIC T90 Dc

Markings with Intrinsically Safe into Division 2 or Zone 2	Class I, II, III, Division 2, Groups A, B, C, D, F, G; Intrinsically Safe outputs to Class I, Division 2, Groups A, B, C, D; Class I, Zone 2 AEx ec [ic] IIC T4 Gc; Class I, Zone 2 AEx ec nA [ic] IIC T4 Gc; Zone 2 AEx tc [ic Gc] IIIC T90 Dc
Temperature code	T4 (-40 °C ≤ Ta ≤ 65 °C)

Special Conditions for Safe Use(X)

1. Warning: Potential electrostatic charging hazard - See instructions.
2. Warning: The equipment is not capable of withstanding the 500V electrical strength test as defined in Clause 6.1 of UL 60079-7:2017 and 6.3.13 of UL 60079-11:2014. This must be taken into account during installation.

8.6 Canada

N6 Canada Division 2 with Intrinsically Safe Outputs

Certificate	80009647 (CSA)
Standards	CAN/CSA C22.2 No 60079-0:2019, CAN/CSA C22.2 No 60079-7:2016, CAN/CSA C22.2 No 60079-11:2014, CAN/CSA C22.2 No 60079-15:2018, CAN/CSA C22.2 No 60079-31:2016, CAN/CSA C22.2 No.25:2014, CAN/CSA C22.2 No.61010-1-12 3rd Edition
Markings with Intrinsically Safe into Division 1 or Zone 0	Class I, II, III, Division 2, Groups A, B, C, D, F, G; Intrinsically Safe outputs to Class I, Division 1, Groups A, B, C, D; Ex ec [ia Ga] IIC T4 Gc; Ex ec nA [ia Ga] IIC T4 Gc; Ex tc [ia Ga] IIIC T90 Dc
Markings with Intrinsically Safe into Division 2 or Zone 2	Class I, II, III, Division 2, Groups A, B, C, D, F, G; Intrinsically Safe outputs to Class I, Division 2, Groups A, B, C, D; Ex ec [ic] IIC T4 Gc; Ex ec nA [ic] IIC T4 Gc; Ex tc [ic Gc] IIIC T90 Dc
Temperature code	T4 (-40 °C ≤ Ta ≤ 65 °C)

Special Conditions for Safe Use(X)

1. Warning: Potential electrostatic charging hazard - See instructions. AVERTISSEMENT - RISQUE D'EXPLOSION. NE PAS DÉBRANCHER PENDANT QUE LE CIRCUIT EST SOUS TENSION.
2. Warning: The equipment is not capable of withstanding the 500V electrical strength test as defined in Clause 6.1 of CAN/CSA 60079-7:2016 and 6.3.13 of CAN/CSA 60079-11:2014. This must be

taken into account during installation. Avertissement: L'équipement n'est pas capable de résister au test de résistance électrique de 500 V tel que défini dans la clause 6.1 de CAN / CSA 60079-7: 2016 et 6.3.13 de CAN / CSA 60079-11: 2014. Ceci doit être pris en compte lors de l'installation.

8.7 Europe

N1 ATEX Increased Safety with Intrinsically Safe Outputs to Zone 0


Certificate SGS20ATEX0036X

Markings  II 3(1)G Ex ec [ia Ga] IIC T4 Gc (-40°C ≤ Ta ≤ +65°C)

Standards EN IEC 60079-0: 2018, EN IEC 60079-7:2015+A1:2018, EN 60079-11: 2012, EN 60079-15:2010, EN 60079-31:2014

N1 ATEX Increased Safety with Intrinsically Safe Outputs to Zone 0 (For use only with the Cisco Outdoor Access Point Model IW-6300H-AC-x-K9)

Certificate SGS20ATEX0036X

Markings  II 3(1)G Ex ec nA [ia Ga] IIC T4 Gc (-40°C ≤ Ta ≤ +65°C)


Standards EN IEC 60079-0: 2018, EN IEC 60079-7:2015+A1:2018, EN 60079-11: 2012, EN 60079-15:2010, EN 60079-31:2014

Special Conditions for Safe Use (X):

1. The enclosure's polyurethane paint finish may constitute an electrostatic hazard. Care should be taken to protect it from external conditions conducive to the build-up of electrostatic charge on such surfaces. The equipment must only be cleaned with a damp cloth.
2. The equipment is not capable of withstanding the 500V electrical strength test as defined in clause 6.1 of EN 60079-7:2015+ A1:2018 and 6.3.13 EN 60079-11:2012. This must be taken into account during installation.

N1 ATEX Increased Safety with Intrinsically Safe Outputs to Zone 2


Certificate SGS20ATEX0057X

Markings  II 3G Ex ec [ic] IIC T4 Gc (-40°C ≤ Ta ≤ +65°C)

Standards EN IEC 60079-0: 2018, EN IEC 60079-7:2015+A1:2018, EN 60079-11: 2012, EN 60079-15:2010, EN 60079-31:2014

N1 ATEX Increased Safety with Intrinsically Safe Outputs to Zone 2 (For use only with the Cisco Outdoor Access Point Model IW-6300H-AC-x-K9)

Certificate SGS20ATEX0057X

Markings  II 3G Ex ec nA [ic] IIC T4 Gc (-40°C ≤ Ta ≤ +65°C)

Standards EN IEC 60079-0: 2018, EN IEC 60079-7:2015+A1:2018, EN 60079-11: 2012, EN 60079-15:2010, EN 60079-31:2014

Special Conditions for Safe Use (X):

1. The enclosure's polyurethane paint finish may constitute an electrostatic hazard. Care should be taken to protect it from external conditions conducive to the build-up of electrostatic charge on such surfaces. The equipment must only be cleaned with a damp cloth.
2. The non-intrinsically safe Supply, Modbus RTU & Ethernet Port connections of the equipment must be supplied from either safety extra low-voltage (SELV) or protective extra low-voltage (PELV) circuits, for example equipment complying with the requirements of either the IEC 60950 series, IEC 61010-1 or a technically equivalent standard.
3. The equipment is not capable of withstanding the 500V electrical strength test as defined in clause 6.1 of EN 60079-7:2015+ A1:2018 and 6.3.13 EN 60079-11:2012. This must be taken into account during installation.

ND ATEX Dust-Ignition Proof with Intrinsically Safe Outputs to Zone 0

Certificate SGS20ATEX0036X

Markings  II 3D (1G) Ex tc [ia IIC Ga] IIIC T90°C Dc (-40°C ≤ Ta ≤ +65°C)

Standards EN IEC 60079-0: 2018, EN IEC 60079-7:2015+A1:2018, EN 60079-11: 2012, EN 60079-15:2010, EN 60079-31:2014

Special Conditions for Safe Use (X):

1. The enclosure's polyurethane paint finish may constitute an electrostatic hazard. Care should be taken to protect it from external conditions conducive to the build-up of electrostatic charge on such surfaces. The equipment must only be cleaned with a damp cloth.
2. The equipment is not capable of withstanding the 500V electrical strength test as defined in clause 6.1 of EN 60079-7:2015+ A1:2018 and 6.3.13 EN 60079-11:2012. This must be taken into account during installation.

ND ATEX Dust-Ignition Proof with Intrinsically Safe Outputs to Zone 2

Certificate SGS20ATEX0036X

Markings  II 3D (3G) Ex tc [ic IIC Gc] IIIC T90°C Dc (-40°C ≤ Ta ≤ +65°C)

Standards EN IEC 60079-0: 2018, EN IEC 60079-7:2015+A1:2018, EN 60079-11: 2012, EN 60079-15:2010, EN 60079-31:2014

Special Conditions for Safe Use (X):

1. The enclosure's polyurethane paint finish may constitute an electrostatic hazard. Care should be taken to protect it from external conditions conducive to the build-up of electrostatic charge on such surfaces. The equipment must only be cleaned with a damp cloth.
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3. The equipment is not capable of withstanding the 500V electrical strength test as defined in clause 6.1 of EN 60079-7:2015+ A1:2018 and 6.3.13 EN 60079-11:2012. This must be taken into account during installation.

8.8 International

N7 IECEx Increased Safety with Intrinsically Safe Output to Zone 0

Certificate IECEx BAS.20. 0022X

Markings Ex ec [ia Ga] IIC T4 Gc (-40°C ≤ Ta ≤ +65°C)

Standards IEC 60079-0: 2017, IEC 60079-7:2015+A1:2017, IEC 60079-11: 2011, IEC 60079-15:2017, IEC 60079-31:2013

N7 IECEx Increased Safety with Intrinsically Safe Outputs to Zone 0 (For use only with the Cisco Outdoor Access Point Model IW-6300H-AC-x-K9)

Certificate IECEx BAS.20. 0022X

Markings Ex ec nA [ia Ga] IIC T4 Gc (-40°C ≤ Ta ≤ +65°C)

Standards IEC 60079-0: 2017, IEC 60079-7:2015+A1:2017, IEC 60079-11: 2011, IEC 60079-15:2017, IEC 60079-31:2013

Special Conditions for Safe Use (X):

1. The enclosure's polyurethane paint finish may constitute an electrostatic hazard. Care should be taken to protect it from external conditions conducive to the build-up of electrostatic charge on such surfaces. The equipment must only be cleaned with a damp cloth.

- The equipment is not capable of withstanding the 500V electrical strength test as defined in clause 6.1 of EN 60079-7:2015+ A1:2017. This must be taken into account during installation.

N7 IECEx Increased Safety with Intrinsically Safe Output to Zone 2

Certificate IECEx BAS.20. 0027X

Markings Ex ec [ic] IIC T4 Gc (-40°C ≤ Ta ≤ +65°C)

Standards IEC 60079-0: 2017, IEC 60079-7:2015+A1:2017, IEC 60079-11: 2011, IEC 60079-15:2017, IEC 60079-31:2013

N7 IECEx Increased Safety with Intrinsically Safe Outputs to Zone 2 (For use only with the Cisco Outdoor Access Point Model IW-6300H-AC-x-K9)

Certificate IECEx BAS.20. 0027X

Markings Ex ec nA [ic] IIC T4 Gc (-40°C ≤ Ta ≤ +65°C)

Standards IEC 60079-0: 2017, IEC 60079-7:2015+A1:2017, IEC 60079-11: 2011, IEC 60079-15:2017, IEC 60079-31:2013

Special Conditions for Safe Use (X):

- The enclosure's polyurethane paint finish may constitute an electrostatic hazard. Care should be taken to protect it from external conditions conducive to the build-up of electrostatic charge on such surfaces. The equipment must only be cleaned with a damp cloth.
- The non-intrinsically safe Supply, Modbus RTU & Ethernet Port connections of the equipment must be supplied from either safety extra low-voltage (SELV) or protective extra low-voltage (PELV) circuits, for example equipment complying with the requirements of either the IEC 60950 series, IEC 61010-1 or a technically equivalent standard.
- The equipment is not capable of withstanding the 500V electrical strength test as defined in clause 6.1 of EN 60079-7:2015+ A1:2017. This must be taken into account during installation.

NF IECEx Dust-Ignition Proof with Intrinsically Safe Outputs to Zone 0

Certificate IECEx BAS.20. 0022X

Markings Ex tc [ia IIC Ga] IIIC T90°C Dc (-40°C ≤ Ta ≤ +65°C)

Standards IEC 60079-0: 2017, IEC 60079-7:2015+A1:2017, IEC 60079-11: 2011, IEC 60079-15:2017, IEC 60079-31:2013

Special Conditions for Safe Use (X):

1. The enclosure's polyurethane paint finish may constitute an electrostatic hazard. Care should be taken to protect it from external conditions conducive to the build-up of electrostatic charge on such surfaces. The equipment must only be cleaned with a damp cloth.
2. The equipment is not capable of withstanding the 500V electrical strength test as defined in clause 6.1 of EN 60079-7:2015+ A1:2017. This must be taken into account during installation.

NF IECEx Dust-Ignition Proof with Intrinsically Safe Outputs to Zone 2

Certificate IECEx BAS.20. 0027X




Markings Ex tc [ic IIC Gc] IIIC T90°C Dc (-40°C ≤ Ta ≤ +65°C)



Standards IEC 60079-0: 2017, IEC 60079-7:2015+A1:2017, IEC 60079-11: 2011, IEC 60079-15:2017, IEC 60079-31:2013

Special Conditions for Safe Use (X):

1. The enclosure's polyurethane paint finish may constitute an electrostatic hazard. Care should be taken to protect it from external conditions conducive to the build-up of electrostatic charge on such surfaces. The equipment must only be cleaned with a damp cloth.
2. The non-intrinsically safe Supply, Modbus RTU & Ethernet Port connections of the equipment must be supplied from either safety extra low-voltage (SELV) or protective extra low-voltage (PELV) circuits, for example equipment complying with the requirements of either the IEC 60950 series, IEC 61010-1 or a technically equivalent standard.
3. The equipment is not capable of withstanding the 500V electrical strength test as defined in clause 6.1 of EN 60079-7:2015+ A1:2017. This must be taken into account during installation.

8.9 Declaration of Conformity

	<h2>EU Declaration of Conformity</h2> <p>No: RMD 1157 Rev. B</p>	
<p>We,</p>		
<p>Rosemount Inc. 6021 Innovation Blvd. Shakopee, MN 55379 USA</p>		
<p>declare under our sole responsibility that the product,</p>		
<p>Emerson™ Wireless 1410S Gateway</p>		
<p>manufactured by,</p>		
<p>Rosemount Inc. 6021 Innovation Blvd. Shakopee, MN 55379 USA</p>		
<p>to which this declaration relates, is in conformity with the provisions of the European Community Directives, including the latest amendments, as shown in the attached schedule.</p>		
<p>Assumption of conformity is based on the application of the harmonized standards and, when applicable or required, a European Community notified body certification, as shown in the attached schedule.</p>		
	<p>Vice President of Global Quality</p>	
<p>(signature)</p>	<p>(function name - printed)</p>	
<p>Chris LaPoint</p>	<p>27-March-2020</p>	
<p>(name - printed)</p>	<p>(date of issue)</p>	
<p>Page 1 of 3</p>		

EU Declaration of Conformity

No: RMD 1157 Rev. B

ATEX Directive (2014/34/EU)
Emerson™ Wireless 1410S Gateway

**SGS20ATEX0036X – Increased Safety with Intrinsically Safe Outputs to Zone 0
 and Dust-Ignition Proof with Intrinsically Safe Outputs to Zone 0**

Equipment Group II Category 3 (1) G
 Ex ec [ia Ga] IIC T4 Gc (-40°C ≤ T_a ≤ +65°C)
 Ex ec nA [ia Ga] IIC T4 Gc (-40°C ≤ T_a ≤ +65°C)

Equipment Group II Category 3D (1G)
 Ex tc [ia IIC Ga] IIIC T90° Dc (-40°C ≤ T_a ≤ +65°C)

Harmonized Standards:
 ENIEC 60079-0:2018
 EN 60079-7: 2015 + A1:2018
 EN 60079-11:2012
 EN 60079-15:2010
 EN 60079-31:2014



**SGS20ATEX0057X – Increased Safety with Intrinsically Safe Outputs to Zone 2
 and Dust-Ignition Proof with Intrinsic Safe Outputs to Zone 2**

Equipment Group II Category 3G
 Ex ec [ic] IIC T4 Gc (-40°C ≤ T_a ≤ +65°C)
 Ex ec nA [ic] IIC T4 Gc (-40°C ≤ T_a ≤ +65°C)

Equipment Group II Category 3D (3G)
 Ex tc [ic IIC Gc] IIIC T90° Dc (-40°C ≤ T_a ≤ +65°C)

Harmonized Standards:
 ENIEC 60079-0:2018
 EN 60079-7: 2015 + A1:2018
 EN 60079-11:2012
 EN 60079-15:2010
 EN 60079-31:2014

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EU Declaration of Conformity

No: RMD 1157 Rev. B

ATEX Notified Bodies

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P.O. Box 30 (Särkiniementie 3)
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Finland

ATEX Notified Body for Quality Assurance

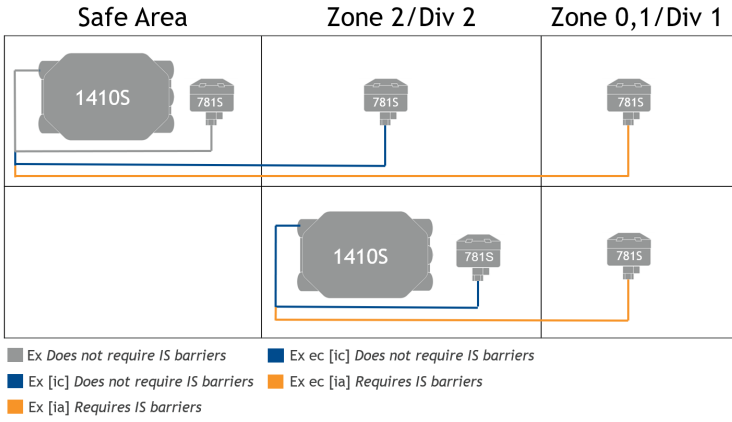
SGS FIMCO OY [Notified Body Number: 0598]
P.O. Box 30 (Särkiniementie 3)
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Finland

Page 3 of 3

9 Reference data

For information on product specs, dimensional drawings, ordering information or the complete reference manual, see Emerson.com.

Figure 9-1: Hazardous Location Installation





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