



## **VPx Access Point User Manual**

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## 2.0 Introduction

A ViewPoint VPx sensor transmits signals in the radio frequencies summarized in Table 2-1 VPx Access Point Radio Transmission Frequencies. Other than for 802.11 b/g Wi-Fi applications, a networked ViewPoint VPx Access Point (“AP”) is required to receive radio transmissions from a VPx sensor.

Radio Frequency	Description	ViewPoint Release	Notes & Comments
915 MHz	ISM Band, Region 2 (North & South America)	v1.1	P/N CM-000251

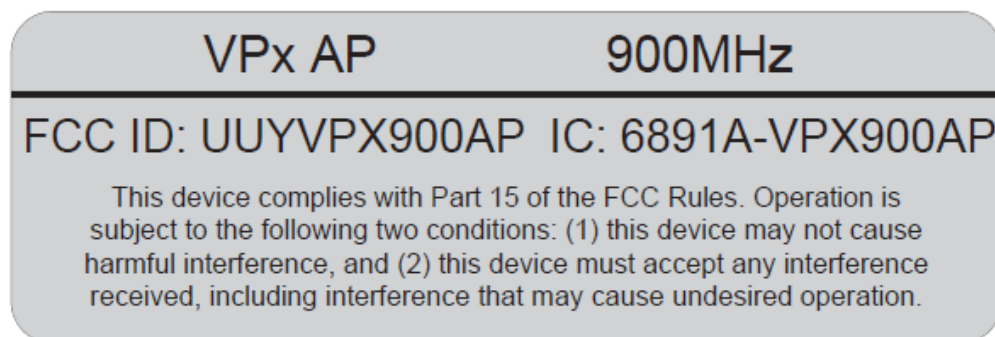
Table 2-1 VPx Access Point Radio Transmission Frequencies

VPx RF transmits power + 12.5 dBm with a selectable range:

- 902.62 MHz to 914.87 MHz (Low Band)
- 906.12 MHz to 924.12 MHz (Standard)
- 914.87 MHz to 927.62 MHz (Hi Band)

The VPx AP complies with Part 15 of the FCC Rules. Access Point operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Ex.



## 2.1 FCC NOTICE

**WARNING:** This equipment has been tested and found to comply with the limits for Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction's manual, may cause interference to radio communications. Operation of this equipment in a residential area is likely to cause interference in which case the user will be required to correct the interference at his own expense.

The user is cautioned that changes and modifications made to the equipment without approval of the manufacturer could void the user's authority to operate this equipment.

**RF Exposure Notice:** To satisfy RF exposure requirements, this device and its antennas must operate with a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

## 2.2 Industry Canada

*Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.*

*This radio transmitter (IC: 6891A-VPX900AP) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.*

***[Immediately following the above notice, The manufacturer shall provide a list of all antenna types approved for use with the transmitter, indicating the maximum permissive antenna gain (in dBi) and required impedance for each.]***

1. Pulse W1063, maximum gain 3 dBi, 50 ohm
2. L-COM HG903RD-RSP, maximum gain 3 dBi, 50 ohm

*This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.*

***IMPORTANT NOTE: Radiation Exposure Statement:***

*This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.*

*Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.*

*Le présent émetteur radio (IC: 6891A-VPX900AP) de modèle s'il fait partie du matériel de catégorie I) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.*

***[Immediately following the above notice, The manufacturer shall provide a list of all antenna types approved for use with the transmitter, indicating the maximum permissive antenna gain (in dBi) and required impedance for each.] – This would be putting the list in French.***

1. Pulse W1063, le gain max 3 dBi, 50 ohm
2. L-COM HG903RD-RSP, le max gain 3 dBi, 50 ohm

*Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

***NOTE IMPORTANTE: Déclaration d'exposition aux radiations:***

*Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.*

## 3.0 Features

Mount the VPx AP on a wall or other surface that allows it to maximize its radio coverage area and range. LEDs indicate device status and the device's physical connectors as detailed in Table 2.1-1 below.

### 3.1 Indicator LEDs

Figure 3-1 - VPx Access Point (Bottom and Front View) is a bottom and front-view image of the VPx Wireless Access Point. There are two LEDs on the front of the access point that indicate device status as summarized in Table 3-1 VPx Access Point LED Status Summary:

LED	Status & Description	Notes & Comments
Power	<b>Solid</b> - Indicates when the device is powered on.	Solid ON = powered on OFF = Not powered  Power source is either Power-Over-Ethernet (POE) or 6 V DC, <1.5A line power.
Service Link Status	<b>Solid</b> – AP is connected to the network and communicating normally with the application server.	Status is NORMAL
Service Link Status	<b>Slow Flash</b> –AP is in the process of associating with the LAN or establishing a network connection with the application server	Flash rate is approximately once per sec. or ~1 Hz

Service Link Status	<b>Rapid Flash</b> –AP is not connected to the network and a power-on reset is required.	Flash rate is approximately three times per seconds or ~ 3 Hz
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Table 3-1 VPx Access Point LED Status Summary



3-1 - VPx Access Point (Bottom and Front View)

### 3.2 Physical Connections

Figure 3-2 - VPx AP Bottom Edge Connectors View is a bottom edge view of the connectors with the VPx AP laying on its back side. The three physical connections are in Table 3-2 VPx AP Physical Connectors.



3-2 - VPx AP Bottom Edge Connectors View

Connection	Description	Notes & Comments
Mini-USB	For factory device configuration. Not used in the field.	Powering on the device is necessary to configure the AP.
Ethernet	Ethernet connection via an RJ-45 connector.	
6V DC Line Power	Barrel Power Connector	Voltage Input – 90~264 VAC Voltage Output – 6V Current Output (Max) – 2A Power – 12W

Table 3-2 VPx AP Physical Connectors



## 4.0 Configuration & Installation Instructions

### 4.1 Configuration Instructions

The following are options for VPx AP configuration:

Full ISM Channelization	902 – 928 MHz
Corning® MobileAccess compatible	906 – 924 MHz
Spectralink™ Upper Band	916 – 924 MHz

Table 4-1 AP Configuration Options

### 4.2 Mounting Instructions

After configuring the VPx AP, mount it on a vertical wall or another suitable surface with at least one metal screw to a plywood backboard or properly-anchored screw in drywall. Double-sided tape, Velcro or interlocking adhesive strips are additional options if a metal screw mount is not suitable for the mounting surface.

The external antenna should be extended straight up vertically or bent at a 45° angle. Do not mount the VPx AP in an area enclosed by a “metal box” or surrounded by metal walls, as these environments attenuate radio signal strength and diminish the ability of the radio to transmit and receive radio signals.

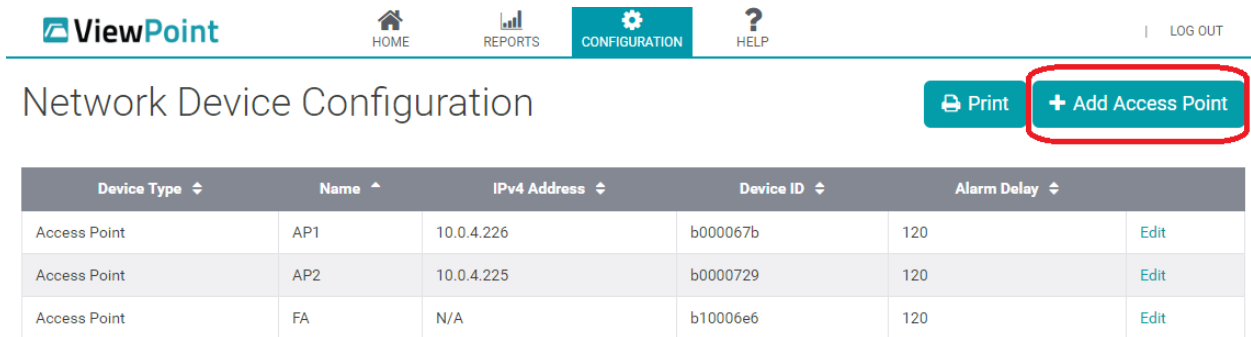
Avoid environmental conditions outside of the limits listed in Table 4-2 Recommended Operating Conditions.

Environmental Condition	Operating Requirement	Notes & Comments
Liquids or Moisture Exposure	Avoid or utilize a suitable NEMA-rated outer enclosure	Includes environments with regular wash downs or wipe downs.
Temperature	-10 °C < Temp < 35 °C	Ideal room temperature is +20 ° C.
Humidity	RH 0 – 85% noncondensing	Ideal %RH is <35%.  Do not exceed 85% RH for more than three consecutive days.

Table 4-2 Recommended Operating Conditions

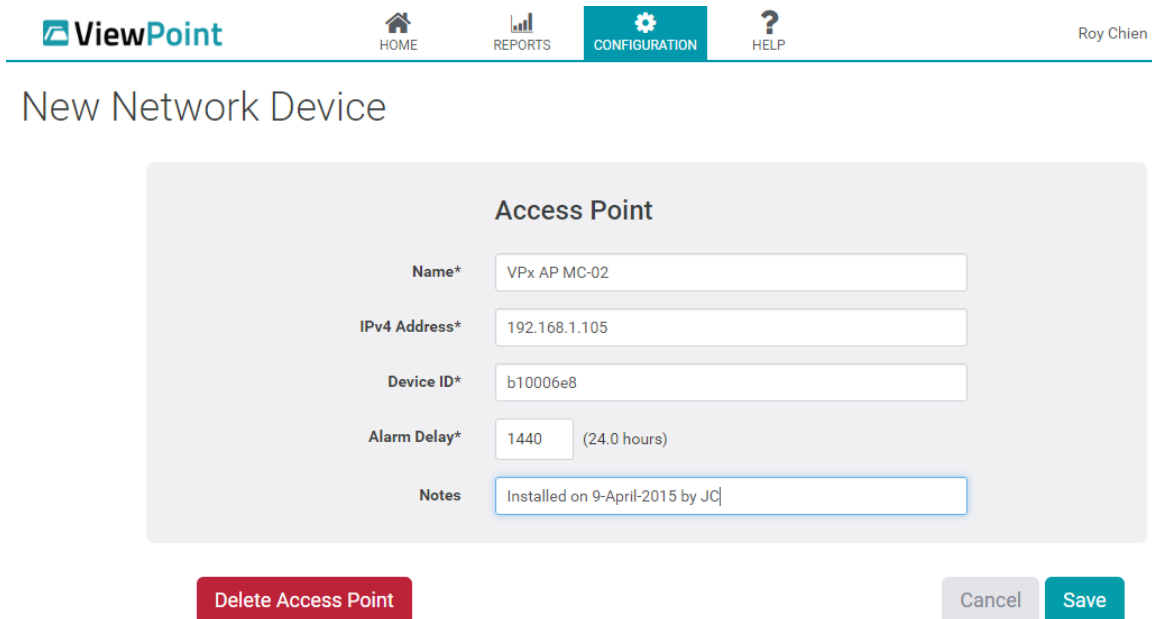
### 4.3 Software Configuration

Complete the final configuration of the VPx AP in the ViewPoint software by selecting the CONFIGURATION Menu and clicking the Add Access Point button as illustrated in Figure 3



4-1 - Network Device Configuration

Fill in the fields in Figure 4 and click the Save button to complete the installation and setup of the VPx AP.



4-2 - New Network Device Setup Page