

Invengo ConneXion is a Windows application that quickly and easily allows users to connect to an Invengo XC-RF850 or XC-RF861 reader and start sending live data via TCP Port, HTTP Post and/or a CSV file in minutes.

# Invengo ConneXion

From the Invengo reader box to production in minutes!



# Invengo ConneXion

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## 1. Acquiring the application

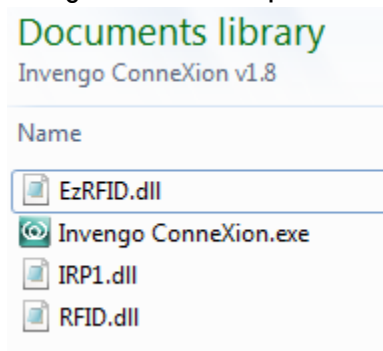
Invengo ConneXion can be acquired from any certified Invengo partner.

If you are not working with an Invengo partner or have questions, please go to the Invengo Support site and open a case.

<http://www.invengo.com/support/>

## 2. Installation

Invengo ConneXion is delivered as a zip file. Create a directory of your choice on your PC and unzip the contents of the Invengo ConneXion zip file into the directory. Your directory should contain the following files.



## 3. Starting Invengo ConneXion:

Start the application by simply double clicking on Invengo ConneXion.exe

You should see the following screen.



Invengo ConneXion - 1.6.5795.33150

Date	Antenna	Device
0		

**Data**

## Invengo

**Device**

Status	Disconnected

**General**

Address:

**Settings**

RF Mode:

Search Mode:

Tag Population:

Session:

Beep  
 Big Number  
 Remove  
 Auto Clear

Total: 0



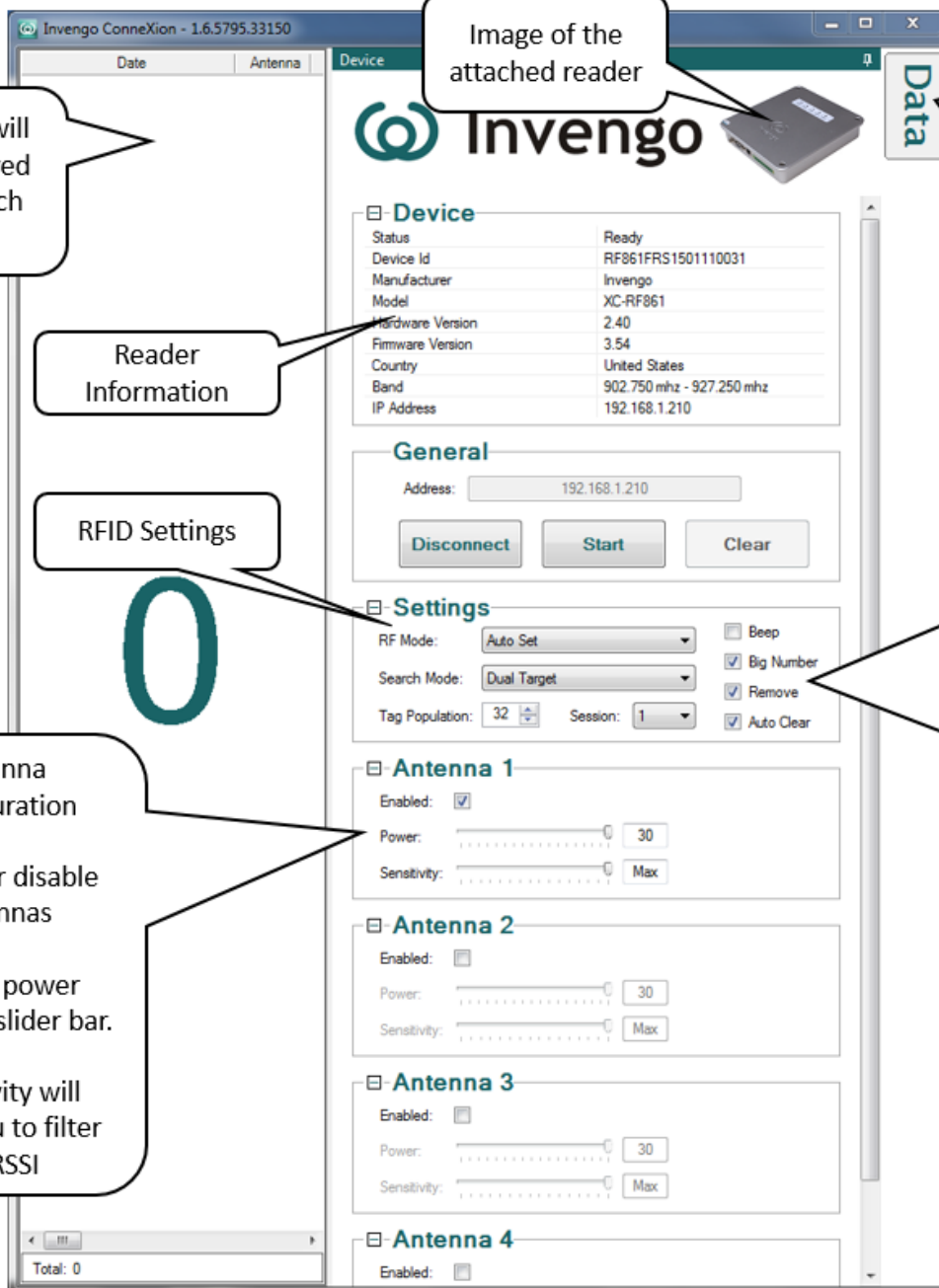
## 4. Configuration

Make sure your Invengo XC-RF861 or XC-RF850 is connected to the network with a properly configured IP address. Invengo readers ship from the factory with a default IP of 192.168.0.210. For a video showing how to connect to the Invengo reader and set the IP address, go to [http://invengo.com/support/Connecting\\_to\\_the\\_Invengo\\_Readers.mp4](http://invengo.com/support/Connecting_to_the_Invengo_Readers.mp4)

Enter the IP address of your reader in the “General” box and click [Connect].

Once connected you will see reader information under “Device” and all of the configurable items will be enabled.

### RFID Configuration:



Tag data will be displayed under each header

Reader Information

RFID Settings

Antenna Configuration  
Enable or disable Antennas  
Set the power using the slider bar.  
Sensitivity will allow you to filter on RSSI

Image of the attached reader

Tab for access to data delivery configuration. Simply hover over the tab to open the next screen. To get back to the main configuration screen, click off of the configuration page (where data will be displayed on the left) and the screen will change in a second or two.

Beep causes the application to beep on every tag read.  
Big Number will display the number of tags on the left.  
Remove will cause the tag reads to disappear if they are not seen again.  
Auto Clear will clear the tag data on the screen when the application is started



## Data Delivery Configuration:

**Enable or Disable Filters**

Reduced Traffic will send tag reads per the value configured in Timeout:

Read Once: If a tag is continually seen within the Timeout value, tag data will only be sent 1 time. If the tag goes out of the field longer than the timeout value and comes back in, tag data will be sent again (1 time)

**Data Selection:**

Enabling each data item will include selected data in the data stream.

Entering a device name and enabling Device Name will include the device name with the tag data.

Time can be sent as EPOCH or Universal

EPOCH example  
1449855334549477

Universal Example  
2015-12-11T17:34:07.0604737Z

**Enabling TCP / IP will send selected data to a socket server via the configured IP Address and Port**

**Enabling HTTP Post will send selected data to the configured URL on an interval selected un Update:**

**Enabling File will write selected data to a text file of your choice located in the directory of your choice by clicking the [Browse] button.**

**Filter**

Enabled:

Filter: Read Once

Timeout: 2 (secs)

**Data**

Device Name: My Invengo XC-RF861

Date/Time: EPOCH

UTC Timestamp: <input checked="" type="checkbox"/>	EPC: <input checked="" type="checkbox"/>
Device Id: <input checked="" type="checkbox"/>	Make: <input checked="" type="checkbox"/>
Device Name: <input checked="" type="checkbox"/>	Model: <input checked="" type="checkbox"/>
Antenna: <input checked="" type="checkbox"/>	Serial Number: <input checked="" type="checkbox"/>
Read Count: <input checked="" type="checkbox"/>	TID: <input checked="" type="checkbox"/>
RSSI: <input checked="" type="checkbox"/>	User Memory: <input checked="" type="checkbox"/>

**TCP / IP**

Enabled:

Address: 192.168.1.112

Port: 5555

**HTTP**

Enabled:

URL: http://myHTTPserver/

Update: 60 (secs)

**File**

Enabled:

Prefix: Invengo ConneXion

Path: C:\1

Total: 9



## 5. Start reading Tags:

# 10

The screenshot shows the 'Invengo ConneXion - 1.6.5795.33150' application window. On the left is a table with columns: Date, Antenna, Count, and EPC. On the right is a control panel with sections for Device, General, Settings, and Antenna 1. A callout bubble points to the 'Stop' button in the General section.

Date	Antenna	Count	EPC
12/11/2015 3:09:12.035687 PM	1	14	4444-4444-4444-444
12/11/2015 3:09:11.824675 PM	1	18	0088-030B-C170-143
12/11/2015 3:09:11.621664 PM	1	16	0088-038C-0601-331
12/11/2015 3:09:12.035687 PM	1	18	0088-038C-0601-331
12/11/2015 3:09:11.416652 PM	1	14	0088-030B-C170-143
12/11/2015 3:09:11.621664 PM	1	15	1111-1111-1111-111
12/11/2015 3:09:12.035687 PM	1	20	0088-030B-C170-143
12/11/2015 3:09:11.621664 PM	1	9	0088-030B-C170-143
12/11/2015 3:09:11.824675 PM	1	6	BBBB-1160-6000-020
12/11/2015 3:09:11.416652 PM	1	4	0088-030B-C170-143

**Device**

Status: Reading  
 Device Id: RF861FRS1501110031  
 Manufacturer: Invengo  
 Model: XC-RF861  
 Hardware Version: 2.40  
 Firmware Version: 3.54  
 Country: United States  
 Band: 902.750 mhz - 927.250 mhz  
 IP Address: 192.168.1.210

**General**

Address: 192.168.1.210

Buttons: Disconnect, Stop, Clear

**Settings**

RF Mode: Auto Set  Beep  
 Search Mode: Dual Target  Big Number  
 Tag Population: 32 Session: 1  Remove  Auto Clear

**Antenna 1**

Enabled:   
 Power: 30

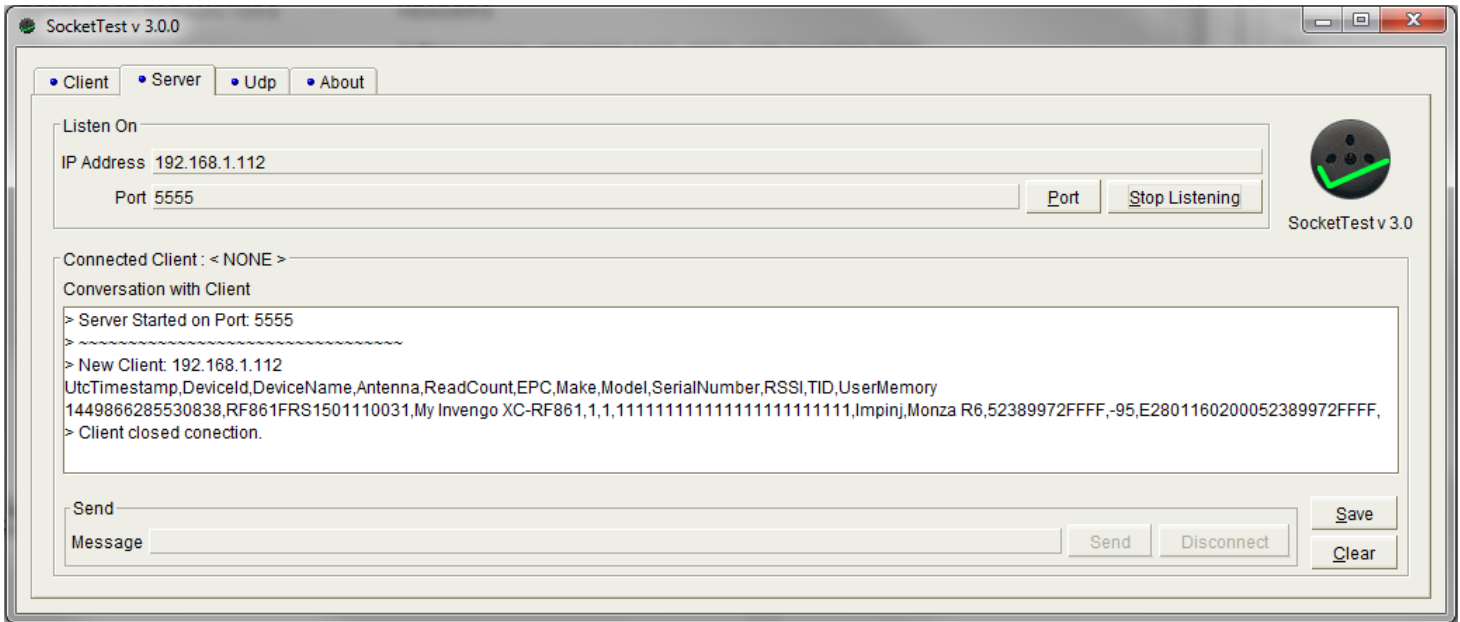
Click on the Start button to begin reading tags. Selected data will be displayed on the left and sent to the configured Delivery Mechanism. Device ID and Device Name won't be displayed on the left but will be in the data stream.



## Data Format:

### TCP / IP example using StocketTest v 3.0.0

Data is sent comma delimited, headers are sent 1 time.



### HTTP Post example using requestb.in

http://requestb.in  
**POST** /1bhiiu21 3s ago  
📎 322 bytes From 75.176.169.127

<p><b>FORM/POST PARAMETERS</b></p> <p>None</p>	<p><b>HEADERS</b></p> <p><b>X-Request-Id:</b> a5b84066-6183-4797-a670-94cb730c1b98  <b>Connection:</b> close  <b>Host:</b> requestb.in  <b>Via:</b> 1.1 vegur  <b>Total-Route-Time:</b> 0  <b>Content-Length:</b> 322  <b>Connect-Time:</b> 0</p>
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**RAW BODY**

```

DeviceName=My+Invengo+XC-RF861&DeviceId=RF861FRS1501110031&Delimiter=%2c&Terminator=%0d%0a&Fields=UtcTimestamp%2cAntenna%2cReadCount%2cEPC%2cMake%2cModel%2cSerialNumber%2cRSSI%2cTID%2cUserMemory&Data=1449866285530838%2c1%2c1%2c11111111111111111111111111111111%2cImpinj%2cMonza+R6%2c52389972FFFF%2c-96%2cE2801160200052389972FFFF%2c
  
```

