Configuring Milesight's VS133 for Xenometric Collection

Contents

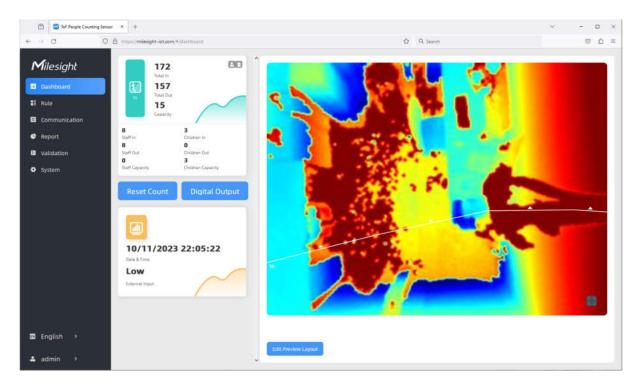# 1 Introduction

The Milesight VS133 (https://www.milesight.com/iot/product/lorawan-sensor/vs133) is a time-of-flight people counter that is capable of adult/child discrimination, group counting and staff detection. Count data can be sent to Xenometric in real-time as well as aggregated for historic data. There are two versions of this sensor, this manual primarily deals with the Ethernet variant VS133P. There is also a LoRaWAN version (VS133), which will be documented separately.

The VS133P (Ethernet version) datasheet can be found here
https://resource.milesight.com/milesight/iot/document/vs133-p-datasheet-en.pdf

The user guide can be downloaded here
https://resource.milesight.com/milesight/iot/document/vs133-p-user-guide-en.pdf
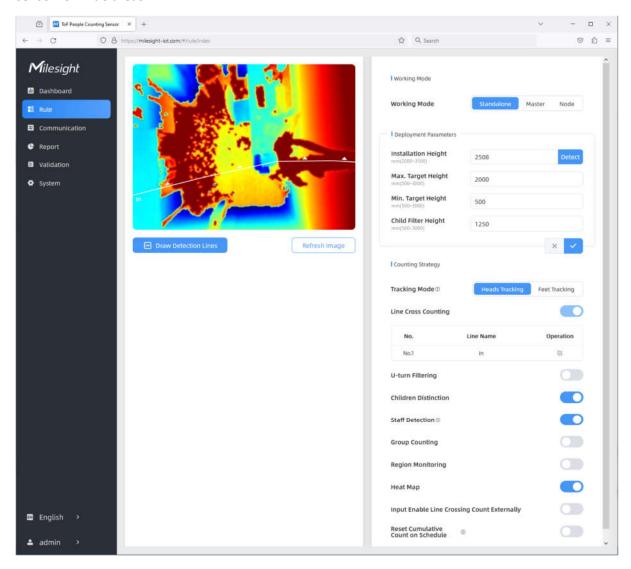
When you login to the sensor, you will see the Dashboard. Remember to check that the date and time are correct. You can also see the counts and the count line over a depth map of the sensor's view.

2 Milesight Counting Rules
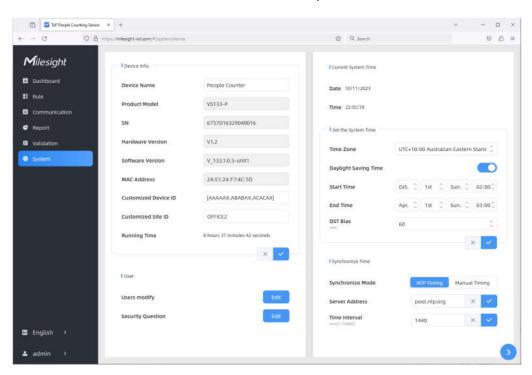
Please refer to the Milesight user manual (https://resource.milesight.com/milesight/iot/document/vs133-p-user-guide-en.pdf) for details on how to create and configure count lines. You can also stitch multiple units to make a single counting sensor for wide areas.
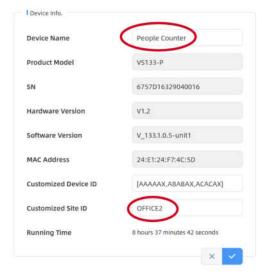
3 Milesight Counting IDs

Navigate to the System page, where you can apply the IDs that Xenometric requires for auto-configuration.

You can also set all the time zone information needed for the sensor to maintain local time. It is important to supply an NTP (network time protocol) server, such as pool.ntp.org. An NTP time interval of 1440 will correct the sensor's clock every 24 hours.

3.2 Site ID and Device Name

The Site ID is an identifier that is shared by all sensors in the same building. It should be all UPPERCASE and should not contain any spaces or non-standard characters. Try to use A-Z, 0-9. If your sensor is sending to Xenometric's Cloud, we will issue you with a Site ID to use.

The Device Name can be any text of your choosing. Location names can be changed in X-Server, so the Device Name has no permanence in the reporting.

5

3.2 Device ID

The Milesight camera will deliver 3 pairs of counts for each count line. These are the in/out counts, children in/out counts and staff in/out counts. The in/out counts do not include the children and staff counts. If you want just an in/out count that includes all visitors (adults, children and staff), it is possible to use a simple Device ID format to combine all counts.

There are 2 Device ID formats that can be used.

1. The first is a simple format that combines all visitors (adults, children and staff). It takes the form of a comma delimited list of device IDs. e.g. AAAAAX,ABABAX,ACACAX

Count line	Device ID	Counts
Line 1	AAAAAX	Adults + Children + Staff
Line 2	ABABAX	Adults + Children + Staff
Line 3	ACACAX	Adults + Children + Staff

If you only have one count line, then you only need one Device ID in the list, e.g. AAAAAX

2. The second format is more complicated, but allows the adults, children and staff to be recorded separately. Each count line is represented by the text within square brackets []. If you have multiple count lines, you can supply several strings surrounded by square brackets, e.g. for a camera with 3 count lines, you would have 3 sets of brackets [][][].

Inside each square bracket we need to supply up 3 individual Device IDs. For example, if we want to use the adult, child and staff counts, we might have a string like [AAAAAX,ABABAX,ACACAX]

For a camera with multiple lines, we might have something like [AAAAAX,ABABAX,ACACAX] [ADADAX,AEAEAX,AFAFAX] [AGAGAX,AHAHAX,AIAIAX]
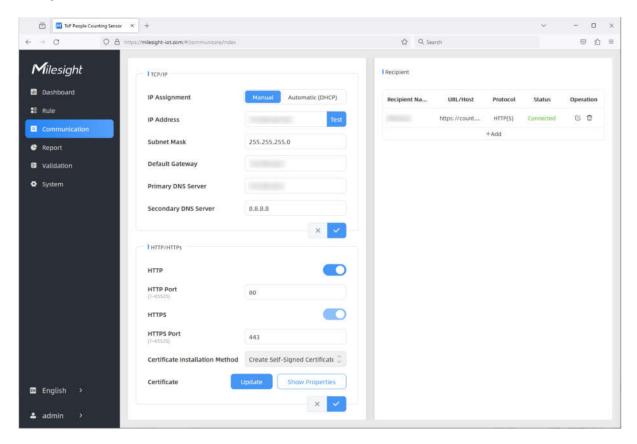
Count line	Device ID
Line 1 Adults	AAAAAX
Line 1 Children	ABABAX
Line 1 Staff	ACACAX
Line 2 Adults	ADADAX
Line 2 Children	AEAEAX
Line 2 Staff	AFAFAX
Line 3 Adults	AGAGAX
Line 3 Children	AHAHAX
Line 3 Staff	AIAIAX

If you don't need the children or staff counts, you can omit their Device IDs from the string. This string [AAAAAX, ,ABABAX] [ACACAX,ADADAX,] would omit children from the first line and would omit staff from the second line.

For many installations there will only be a single count line. If you need separate counts for adults, children and start a Device ID of [AAAAAX,ABABAX,ACACAX] is good (assuming other sensors are no using AA, AB and AC).
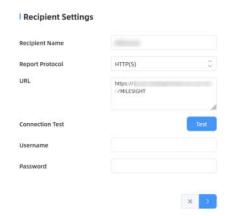
4 Communication

The left panel details the TCP/IP configuration of the sensor and is not part of the Xenometric configuration.
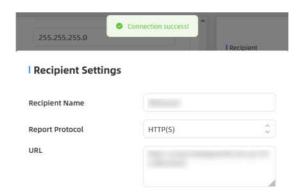

The right panel lists the destinations for data delivery. If no destinations are listed, you can click on the *Add* link to create a new destination. Alternatively, click on the edit icon to change your communication details.

The Recipient Settings allow you to choose between communicating over HTTP(S) or MQTT. Xenometric currently supports the HTTP(S) mechanism, but may add MQTT in the future. Please select the Report Protocol as HTTP(S). The Recipient Name can be any text that helps you identify this destination.
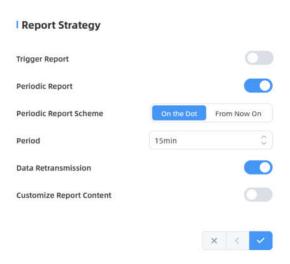

The URL must match the IP and port that the X-Server's X-Push service is listening on. This can be an IP:port or domain:port. The X-Server is capable of acting as an HTTP or HTTPS server, so create the URL according to the HTTP(S) type that you are using in X-Server. For example, http://data.xenometric.com:6000 for non-SSL data on port 6000 or https://192.168.0.20:443 for SSL data transmission on the standard HTTPS port (443).

You can test the connection to make sure the sensor can connect to the server. Click on the *Test* button. You should see a success message. If the test fails, there is most likely a firewall problem.

Click on the arrow button to navigate to the Report Strategy page. This page configures what is sent and how often.

Trigger Report is the real-time data. Periodic Report is the historic data. Unless you specifically need real-time data delivery, the Trigger Report should be switched off.

Always use *On the Dot* for the Periodic Report Scheme, as this aligns the count intervals correctly. For example, a 15-minute period will be aligned to ranges like 14:15:00 – 14:30:00.

Data Retransmission should be on and we don't need to customise the report content for most installations.