Summary

This binocular passenger counter supports "http/https post" to push data to the customer platform, and supports two push modes: interval upload mode and real-time upload mode:

- Interval upload mode is to upload data in a fixed period. If there is no data, the data will be supplemented with 0 to upload. It can be used for data acquisition and device online status judgment;
- The real-time upload mode is to aggregate and upload the current data when there is data. At the same time, in the real-time upload mode, the heartbeat interface is supported. Data upload is used for data acquisition, and heartbeat upload is used for device online status judgment.

Regularly Push Data Interface

Regularly upload passenger flow data through http post, which can be used for data acquisition and device online status judgment; users can set the upload data link and upload time interval (in minutes) through the client.

Data Format

Upload passenger flow data regularly. Examples of data format are as follows:

<?xml version="1.0" encoding="utf-8"?>

<Metrics SiteId="Site ID" SiteName="Site Name" DeviceId="Device ID"

```
DeviceName="Device Name">
  <Properties>
    <Version>1</Version>
    <TransmitTime>1597303008</TransmitTime>
    <MacAddress>4C:BC:98:60:00:9E</MacAddress>
    <IpAddress>192.168.1.100</IpAddress>
    <ConnectionType>Wifi</ConnectionType>
    <WifiSSID>Wifi-SSID</WifiSSID>
    <WifiPassword>Wifi-Password</WifiPassword>
    <IpAddressMethod>Static</IpAddressMethod>
    <HostName>Cam-10030</HostName>
    <Timezone>8</Timezone>
    <DST>0</DST>
    <HwPlatform>V2.1</HwPlatform>
    <SerialNumber>2010010000000001</SerialNumber>
    <DeviceType>0</DeviceType>
    <SwRelease>4.3.0</SwRelease>
  </Properties>
  <ReportData Interval="1">
    <Report Date="2020-08-13">
      <Object Id="0" DeviceId="Device ID" DeviceName="Device Name"
ObjectType="0" Name="count">
```

<Count StartTime="15:15:00" EndTime="15:16:00"
UnixStartTime="1597302900" Enters="0" Exits="0" Passings="0" Returns="0"
Status="0"/>
<Count StartTime="15:16:00" EndTime="15:17:00"
UnixStartTime="1597302960" Enters="0" Exits="0" Passings="0" Returns="0"
Status="0"/>
</Object>
</Report>
</ReportData>
</Metrics>

The meaning of each field is as follows:

1. **SiteId**: Site ID
2. **SiteName**: Site Name
3. **DeviceId**: Device ID(Support customization)
4. **DeviceName**: Device Name
5. **Version**: Interface definition version
6. **TransmitTime**: Upload time
7. **MacAddress**: Device MAC address
8. **IpAddress**: Device IP address
9. **ConnectionType**: Connection type [Wired or Wifi]
10. **WifiSSID**: SSID of WiFi connection [valid only when connected to WiFi]
11. **WifiPassword**: Password for WiFi connection [valid only when connected

to WiFi]

12. **IpAddressMethod**: IP address acquisition method [Static or DHCP]
13. **HostName**: Current device host name
14. **Timezone**: Time zone (e.g. 8 stands for east eight districts)
15. **HwPlatform**: Hardware version
16. **SerialNumber**: Device SN
17. **SwRelease**: Software version
18. **ReportDate**: Upload date
19. **Count**: Passenger flow count
20. **StartTime**: Start time
21. **EndTime**: End time
22. **UnixStartTime**: Unix timestamp
23. **Enters**: The number of passengers entering [from outside to inside through the camera field of view]
24. **Exits**: Number of departing passengers [From inside to outside through the camera's field of view]
25. **Passings**: Number of passengers passing by outside [Entering from outside and leaving the camera's field of view]
26. **Returns**: Number of return passengers inside [Enter the camera field of view from inside, then leave the camera field of view and back inside]

Real-time Push Data Interface

Real-time push data uploads passenger flow data through http post. When the passenger flow camera detects someone going throgh the field of view, it will trigger the upload. Each time it is uploaded, the current minute data is summarized and uploaded; Server processing is recommended to be processed according to TransmitTime, and the data sent after the same minute of data is the latest aggregated data of this minute.

Data Format

```
<?xml version="1.0" encoding="utf-8"?>

<RTMetrics SiteId="Site ID" SiteName="Site Name" DeviceId="Device ID"
DeviceName="Device Name">
  <Properties>
    <Version>1</Version>
    <TransmitTime>1597303008</TransmitTime>
    <MacAddress>4C:BC:98:60:00:9E</MacAddress>
    <IpAddress>192.168.1.100</IpAddress>
    <ConnectionType>WiFi</ConnectionType>
    <WifiSSID>Wifi-SSID</WifiSSID>
    <WifiPassword>Wifi-Password</WifiPassword>
    <IpAddressMethod>Static</IpAddressMethod>
    <HostName>Cam-10030</HostName>
```

```
    <Timezone>8</Timezone>
    <DST>0</DST>
    <HwPlatform>V2.1</HwPlatform>
    <SerialNumber>2010010000000001</SerialNumber>
    <DeviceType>0</DeviceType>
    <SwRelease>4.3.0</SwRelease>
  </Properties>
  <ReportData Interval="1">
    <Report Date="2020-08-13">
      <Object Id="0" DeviceId="Device ID" DeviceName="Device Name"
ObjectType="0" Name="count">
        <Count StartTime="15:15:00" EndTime="15:16:00"
UnixStartTime="1597302900" Enters="0" Exits="0" Passings="0" Returns="0"
Status="0"/>
        <Count StartTime="15:16:00" EndTime="15:17:00"
UnixStartTime="1597302960" Enters="0" Exits="0" Passings="0" Returns="0"
Status="0"/>
      </Object>
    </Report>
  </ReportData>
</RTMetrics>
```

The meaning of each field is as follows:

1. **SiteId**: Site ID
2. **SiteName**: Site Name
3. **DeviceId**: Device ID(Support customization)
4. **DeviceName**: Device Name
5. **Version**: Interface definition version
6. **TransmitTime**: Upload time
7. **MacAddress**: Device MAC address
8. **IpAddress**: Device IP address
9. **ConnectionType**: Connection type [Wired or Wifi]
10. **WifiSSID**: SSID of WiFi connection [valid only when connected to WiFi]
11. **WifiPassword**: Password for WiFi connection [valid only when connected to WiFi]
12. **IpAddressMethod**: IP address acquisition method [Static or DHCP]
13. **HostName**: Current device host name
14. **Timezone**: Time zone (e.g. 8 stands for east eight districts)
15. **HwPlatform**: Hardware version
16. **SerialNumber**: Device SN
17. **SwRelease**: Software version
18. **ReportDate**: Upload date
19. **Count**: Passenger flow count
20. **StartTime**: Start time

21. **EndTime**: End time
22. **UnixStartTime**: Unix timestamp
23. **Enters**: The number of passengers entering [from outside to inside through the camera field of view]
24. **Exits**: Number of departing passengers [From inside to outside through the camera's field of view]
25. **Passings**: Number of passengers passing by outside [Entering from outside and leaving the camera's field of view]
26. **Returns**: Number of return passengers inside [Enter the camera field of view from inside, then leave the camera field of view and back inside]

Heartbeat Upload Interface

Heartbeat upload is to make up for the problem that the device and the server have no interaction when there is no event in real-time upload mode. The server cannot determine whether the device is online or not; Heartbeat upload is to upload some attributes of the device according to the set cycle, and the server can judge whether the device is online or not working normally based on this information.

Data Format

<?xml version="1.0" encoding="utf-8"?>

```
<Diags SiteId="Site ID" SiteName="Site Name" DeviceId="Device ID"
DeviceName="Device Name">
  <Properties>
    <Version>1</Version>
    <TransmitTime>1597303008</TransmitTime>
    <MacAddress>4C:BC:98:60:00:9E</MacAddress>
    <IpAddress>192.168.1.100</IpAddress>
    <ConnectionType>Wired</ConnectionType>
    <IpAddressMethod>Static</IpAddressMethod>
    <HostName>Cam-10030</HostName>
    <Timezone>8</Timezone>
    <DST>0</DST>
    <HwPlatform>V2.1</HwPlatform>
    <SerialNumber>2010010000000001</SerialNumber>
    <DeviceType>0</DeviceType>
    <SwRelease>4.3.0</SwRelease>
  </Properties>
</Diags>
```

The meaning of each field is as follows:

1. **SiteId**: Site ID
2. **SiteName**: Site Name

3. **DeviceId**: Device ID(Support customization)
4. **DeviceName**: Device Name
5. **Version**: Interface definition version
6. **TransmitTime**: Upload time
7. **MacAddress**: Device MAC address
8. **IpAddress**: Device IP address
9. **ConnectionType**: Connection type [Wired or Wifi]
10. **IpAddressMethod**: IP address acquisition method [Static or DHCP]
11. **HostName**: Current device host name
12. **Timezone**: Time zone (e.g. 8 stands for east eight districts)
13. **HwPlatform**: Hardware version
14. **SerialNumber**: Device SN
15. **SwRelease**: Software version

Client Settings

Interval Upload Mode

The interval upload mode is set to upload url, deviceId, interval (heartbeatUrl is invalid, it does not affect the function), after filling in the fields, click the set button to take effect.

- URL format: http://IP[:port]/path;
- deviceId is used to find the device ID uniquely on the server side;
- interval is the length of the upload interval, in minutes.

Real-time Upload Mode

Real-time upload mode is set to upload url, heartbeat url, deviceId, interval, fill in the fields and click the set button to take effect.

- URL format: http://IP[:port]/path;
- deviceId is used to find the device ID uniquely on the server side;
- interval is the length of the upload interval, in minutes.