

Crowd People Counter for Milestone XProtect

Milestone XProtect

Crowd People Counter for Milestone XProtect
counts people in a large crowd in real time.



Canon's Crowd People Counter utilizes deep learning to count the number of people with high accuracy even in congested situations.

By displaying the results as a graph, it allows to grasp the changes of the number of people and act for appropriate guidance of people and optimal security.

Current Issue

Ascertain the state of congestion
to implement proper action



Solution

Visualizes the congestion status,
and notifies if necessary

■ Use cases



Station/Airport

By grasping the congestion status of the premises, the system can be used for the optimal arrangement of security guards and the safe guidance of people.



Events

By counting the number of people in a crowd in real time, the system can be used to prevent accidents by immediately arranging security guards.



City area

By analyzing changes in traffic conditions in places such as intersections and main streets, the system can be used to create safe and secure environments.

| Specifications | | Crowd People Counter for Milestone XProtect |
|--|--------|--|
| Function (Input / Output) | Input | Supported cameras: Milestone XProtect Compliant Live/recorded video from network cameras registered to Milestone XProtect Maximum resolution: 5472 x 3648 |
| | Output | Analyzed still image file (JPEG)*1, analysis results file (CSV)*1, log (CSV), analyzed data (JSON)*2 *1 Possible to download analysis results data to Client PC *2 An external system necessary to enable Web API to acquire an analyzed data. |
| Detection Area | | Setting detection areas and non-detection areas respectively <ul style="list-style-type: none"> • Polygon (polygon consisting of 3 to 8 points) • Up to 4 detection areas and 4 non-detection areas |
| Schedule Setting | | Up to 50 schedules can be set. Up to 5 schedules can be set for a camera. Run history can be saved as a text file. |
| Graph Display | | <ul style="list-style-type: none"> • Displays results during the count in the live video (possible to set display interval). • Displays a count result for an arbitrary period* (possible to set display interval automatically according to the period). * By clicking the graph, the first count result within the display interval is shown. |
| Event Notification | | Events are notified when triggered by thresholds. <ul style="list-style-type: none"> - Possible to set 2 levels of thresholds (Warning/Critical) - Possible to set thresholds for a camera or for an aggregated results* of multiple cameras (2 to 5). * Possible to set Multiple camera notification up to 8 sets. |
| Preview of Results | | Displays count results on the screen. Displays aggregated result as graph. |
| Recommended PC Specifications | | [For Analysis Server] CPU: Intel Core i7-6700 or greater*1, Memory: 16GB or more*1 Storage: Sufficient capacity for outputting data is necessary. When outputting JPEG files, one JPEG file is outputted for each count interval, the amount of data from the start till the end of analysis can be calculated by the following formula. Amount of output data from JPEG file= 1 JPEG image file size*2 x period between start and end of analysis (sec.) / count interval (sec.) *1 In the case of simultaneously executing five analysis. The specifications required vary according to the number of analysis to be executed. *2 A JPEG image file size can vary widely, depending on the resolution of the input video, background, and color of the image. [For Client PC] CPU: Intel Core i7-4770 or greater (3.4 GHz or greater), Memory: 8GB or more |
| Operating System | | Windows 10 Pro/Windows 10 Enterprise 64-bit Windows Server 2012 Standard 64-bit Windows Server 2012 R2 Standard 64-bit Windows Server 2016 Standard 64-bit |
| Supported XProtect Server | | Milestone XProtect Corporate 2018 R1/2018 R2/2018 R3/2019 R1/2019 R2/2019 R3/2020 R1/2020 R2/2020 R3 Milestone XProtect Expert 2018 R1/2018 R2/2018 R3/2019 R1/2019 R2/2019 R3/2020 R1/2020 R2/2020 R3 Milestone XProtect Professional+ 2018 R1/2018 R2/2018 R3/2019 R1/2019 R2/2019 R3/2020 R1/2020 R2/2020 R3 Milestone XProtect Professional 2018 R1/2018 R2/2018 R3/2019 R1/2019 R2 Milestone XProtect Express+ 2018 R1/2018 R2/2018 R3/2019 R1/2019 R2/2019 R3/2020 R1/2020 R2/2020 R3 |
| Supported XProtect Client | | Milestone XProtect Smart Client 64-bit 2018 R1/2018 R2/2018 R3/2019 R1/2019 R2/2019 R3/2020 R1/2020 R2/2020 R3 Milestone XProtect Smart Client for Express and Professional 64-bit 2019 R2 |
| Software | | [For Analysis Server] .NET Framework 4.6.1 or later SQL Server Express 2016 Visual C++ 2015 Runtime Library [For Client PC] .NET Framework 4.5.2 or later |
| Display Language | | Japanese/English/French/Italian/German/Spanish - Linked to the language settings of Milestone XProtect Smart Client. Displayed in English for other languages than listed above. |
| Number of Pixels Necessary for Detecting a Person | | 15 pixels for a person's width <ul style="list-style-type: none"> - Maximum detectable number of people at highest resolution: approx. 88,000 - Maximum detectable number of people in full HD: approx. 9,000 |
| Angle Looking Downward on People (Angle of Depression) | | 10° to 65° * * Even within the angle of depression, depending on the degree of congestion of the crowd, the people overlapping may affect the count. |
| Moving Object Silhouetting | | Possible via Moving Object Mask for Milestone XProtect (sold separately) |