

FootfallCam

Centroid™

Product Code: FC-FCT01

Third Party Product Accessories



Key Features

- Easy to install, integrate and maintain
- Real time processing data
- Process up to eight HD full-motion video streams
- Low-power edge intelligent video analytics
- FootfallCam Centroid works in conjunction with FootfallCam people counter and/or any CCTV cameras
- Data Metrics involved in the FootfallCam people counter can be computed by FootfallCam Centroid

CCTV Requirements

- Installed between 2-6m ceiling height (ideal height is between 3-4m)
- Real time Streaming Protocol (RTSP) Compatible processing data
- Allow direct video stream from RTSP enabled IP Cameras or NVR
- No distortion / fisheye lens
- Minimum resolution of 720p
- Minimum Frame rate of 10fps
- Adjustable view angle

FootfallCam Centroid™ processes up to eight HD full-motion video streams in real-time and can be deployed as a low-power edge intelligent video analytics platform for Network Video Recorders (NVR), smart cameras, and IoT gateways. Applications include human detection, pose estimation and car detection.

How it works

1. Multi Stream Video Analytics

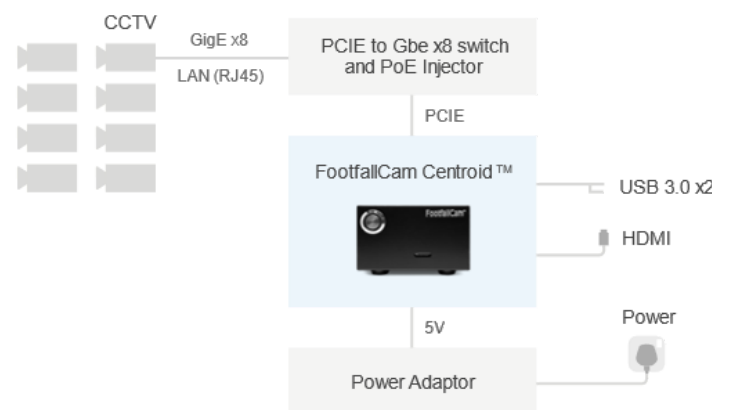


Figure 1: An example NVR architecture using Centroid for ingesting and processing up to 8 digital streams over Gigabit Ethernet with deep learning analytics

2. Object Detection (Localization)



Figure 2: Screenshots from video of Centroid performing object detection on eight 1080p30 streams running at a throughput of 500 megapixels per second (MP/s).

FootfallCam Centroid™

GENERAL SPECIFICATION

Model	Centroid
Weight	270gm
Casing Colour	Black
Casing Material	Metal
Total Dimensions (mm)	104 (W) x 81 (D) x 60 (H)
Warranty	1 year from first allocation date*

* Warranty extension available upon request

PROCESSOR SPECIFICATION

CPU	64-bit Quad-core @ 1.43GHz
GPU	128-core @ 921MHz
Memory	4GB 64-bit LPDDR4 @ 1600MHz 25.6 GB/s
Video Encoder	4Kp30 (4x) 1080p30 (2x) 1080p60
Video Decoder	4Kp60 (2x) 4Kp30 (8x) 1080p30 (4x) 1080p60
Power	10W

INTERFACES SPECIFICATION

USB	4x USB 3.0 A (Host) USB 2.0 Micro B (Device)
Display	HDMI DisplayPort
Networking	Gigabit Ethernet (RJ45)
Wireless	M.2 Key-E with PCIe x1
Storage	MicroSD card (16GB UHS-1 recommended minimum)
SIM Card	4G/LTE/3G
Other I/O	(3x) I2C (2x) SPI UART I2S GPIOs
Power Supply	5V4A DC Power Adapter

OPERATIONAL

Average Data Transfer Rate* 5.0 kilobytes/hour

* Average Data Transfer Rate is measured with a predefined sample size of 20 requests per hour.

