First Look

When I receive this camera from Gain City, my first thought was, wow, this is one cool looking smart device for anyone who have a modern looking home to boast about.

The new SNH-V6410PN from Samsung certainly deserves praises to its designers. A small looking stylish camera displayed in a see through glass on the top of the product packaging. This packaging simply flaunts it all. Samsung have done a very good job on the packaging to show the consumer what to expect in the box without a need to put any physical unit out on the showroom.

What is in the package?

1 x Camera Unit

1 x Mounting Bracket (Trust me, it is cool looking)

1 x Mounting Screw (yes, the one that also screw the camera onto the display on the box)

1 x Mounting screws (accessories)

1 x USB Safety Mark Power Adapter and Micro-USB Cable

All the warranty, user guides, etc.

Size Factor

As you can see from the photo below, the camera is just slightly thicker than the new Note 7 and is HALF the size in height to the phone upright. Small is beauty.

More photos of this beautiful product

The bracket makes the camera looks very futuristic, not like conventional IP Cameras which brackets really needs to break away from the conventional design

Technical Aspect

- 1920x1080P (2Megapixel) Resolution, with H.264 Video Compression
- Pan / Tilt (350° / 155°)
- Night Vision
- 24x7 Continuous Recording
- Motion & Audio Detection Alarm
- 2-Way Communication
- Object AUTO Tracking
- Wide Dynamic Range
- Supports iOS & Android devices
- Support IE 9.0 or higher (only 32Bit browsers), Firefox
- Supports Mac OS X 10.7 or higher, Safari, Firefox

About Review Environment

A Standard HDB Flat with big living room (Square) ~~provided by third party~~

1Gbps Fibre Internet on ASUS RT-AC66U
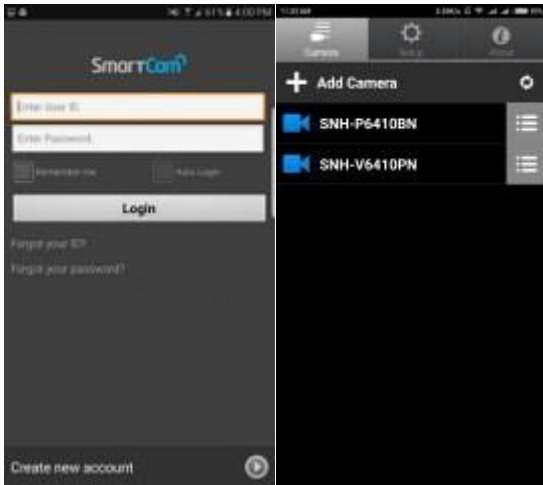
Tested using 2.4GHz at 20MHz frequency

4G mobile network on Samsung Note 7

Samsung SmartCam APP

In my review, I am using Samsung Note 7 as my choice of mobile device. You can download the Samsung SmartCam App from both the PLAY and APPLE Store.

The APP have a clean interface with minimum icons. For non IT people, this is a plus. Upon Login into the APP, you get to see the Camera Listing which you can add cameras into the List (Mine was added before the screen shot was done) plus a Setup Icon which is the setup for the APP.

In Setup, You can configure the APP's notification, your initial default Video Profile of what resolution you want to see when you login to any of your camera. And management of your local video, which your locally (phone) recorded video is being copied over to your camera's VIDEO area. Remember to delete your local video clips to avoid clogging up your local recordings (30sec)

Simple Setup

Any cloud-based IP Cameras should be easy to setup, the loan unit achieved this. ~~I received surely give me this~~. Without looking into the setup guide, I was able to follow the simple guide on the APP to complete adding a camera and to get it working. And this is only a one time process, the camera that you add to your account, will be there even when you change to a new devices. ~~Just need to login will do.~~ Simply login to the APP to see the cameras

Procedure

1. Register an account
2. Press on Wireless Button below the camera til you see blinking yellow LED in front
3. Add Camera on APP, select the detected camera
4. Add Wireless to the camera
5. Press No to complete or Yes to further configure other options

It took me only under 2 minutes less registering and logging into an account to setup the camera. Oh yes. Make sure you are on WIFI network at home.

Camera's Features & Capabilities

LIVE Streaming Connectivity

In my testing, I have no problem connecting to the camera within average of 5 seconds. ~~In bad 4G connection areas, it can be as long as 10 seconds, but that is kind of expected.~~

Viewing Angle

Online specification shows Angular Field of View (D/V/H) as 96.1° / 43.4° / 80.9°. However, the view I get is quite broad, as the camera placed at 1 corner is able to allow us to see almost the entire 2 end of the living hall. Coupled with the Auto-Tracking, you no longer need an Ultra Wide Angle Lens as the camera can track a moving object and follow~~s it.~~

Zooming (Digital)

The camera supports 3X Zoom on iOS, Android but 10X zoom on web browser. For new owners of IP Cameras, let me remind you that Digital Zoom is "blowing up" the pixels not making it clearer nor sharper. This is only achievable via optical zoom.

A good to have feature, in sufficient lighting environment, you can see clearly. But in insufficient lighting environment, this can be a challenge

Night Vision

This camera has an effective range of 5 Meters which is sufficient for most of HDB & Condo housing in Singapore. Images are sharp at night and clear.

Effective range is 5 Meters, however, the IR is still able to penetrate beyond the limit, just that it will not be as bright as the effective range.

Response Time

Response time of the camera relatively ties back to varies factor. Your home internet speed and your mobile internet speed. There is a standard 1~2 second delay between your action and the streaming of the changes to come to your phone when you swipe it.

Streaming from the camera is smooth, the camera is responsive to commands, you can define small movement pan/tilt using the arrow keys while faster pan/tilt with swipes in full screen mode.

SmartCam APP

Quality: **3 Levels** - **Low**, **Medium**, **High**

In the Application itself, under Setup, the Video Profile is set to Low Resolution to allow you to establish the fastest connectivity and streaming. You may change this to your preference, I personally like to leave it at Low so that I can connect to the camera at the shortest time and change resolution during streaming based on my network condition

The Low Resolution is clear to show you the surround, but not in greater details. Speed of motion is very constant and instant*.

The Medium Resolution gives you resolution in greater details, words can be seen clearly from the picture below.

The High Resolution brings everything in the greatest possible details, image are sharper and you can definitely see the difference between medium and high. In high details, everything is clearer but speed wise, if under 4G conditions, may have to expect your expectation on the streaming continuity.
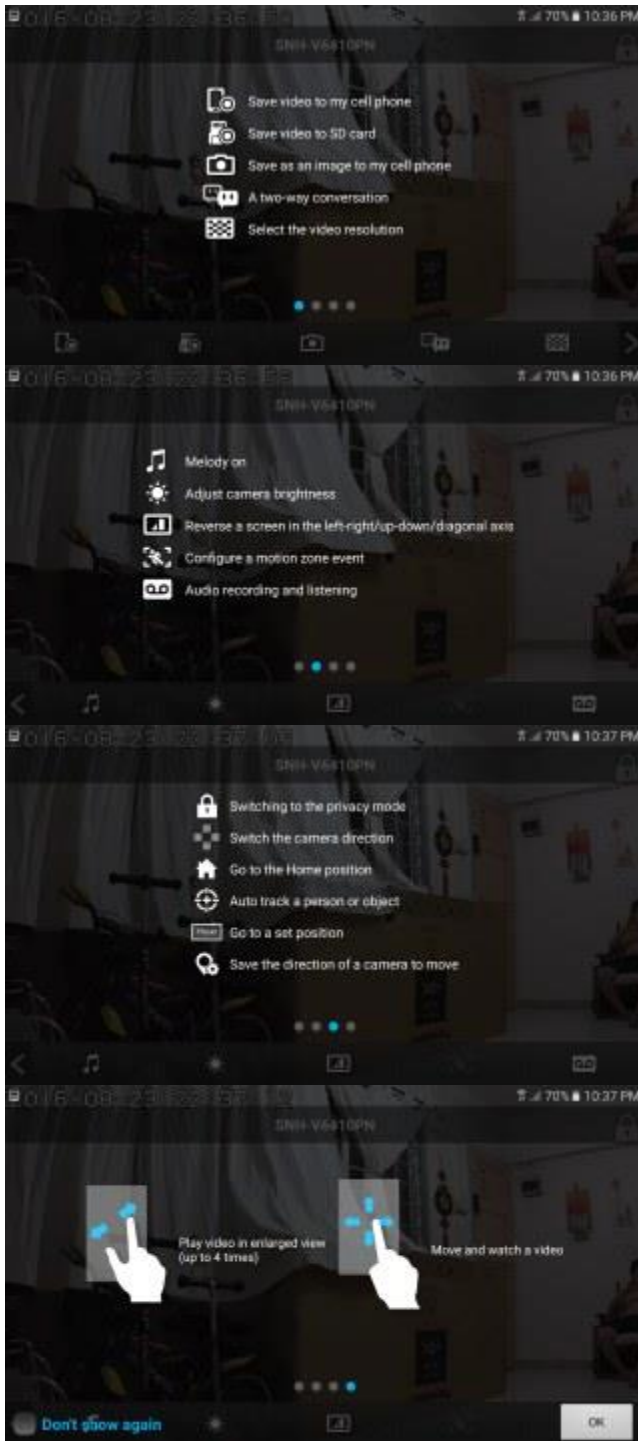

* There will definitely be a streaming delay for all IP Cameras.

I like the fact that LIVE view, they start you up with a HELP screen showing you what the icons represent. You can hide this recurrent display after you get familiar with the interface.

LIVE View Help Screen
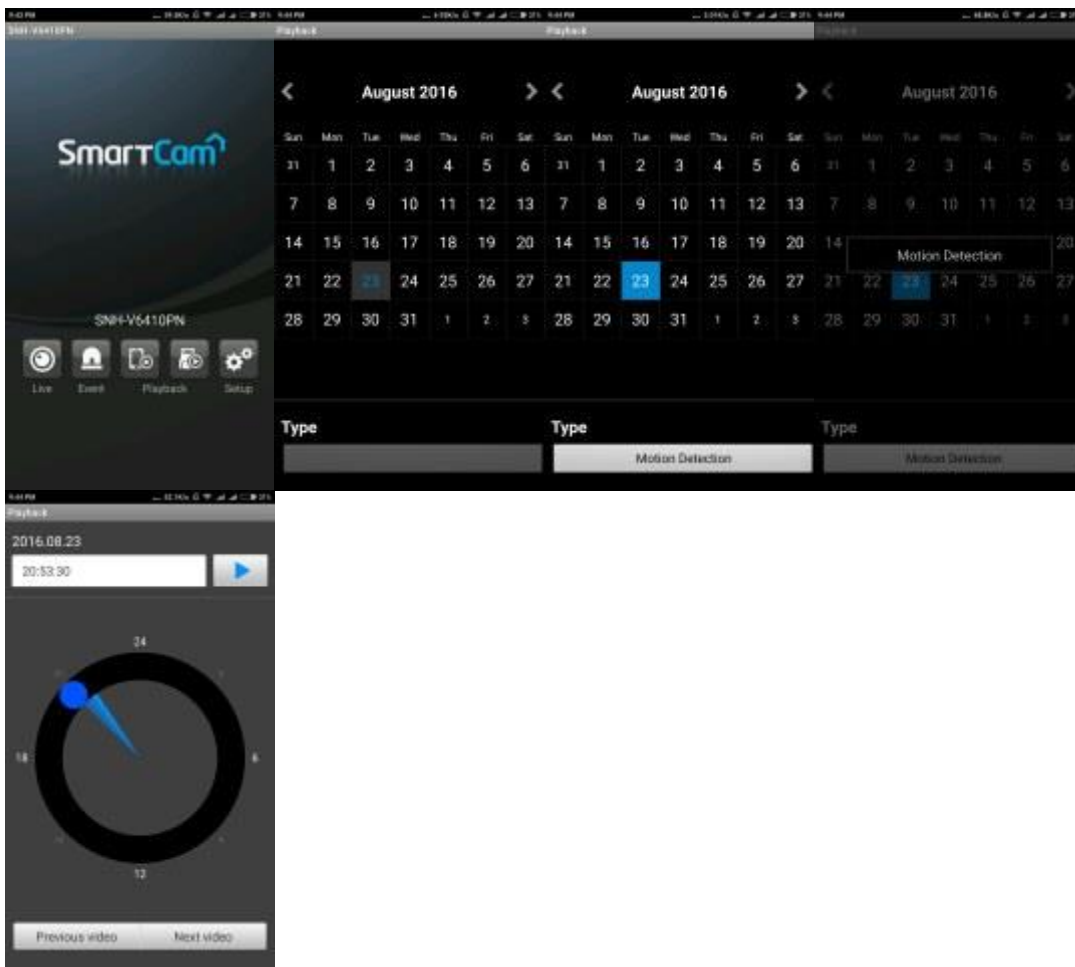
LIVE View Recording Possible

The camera supports up to 30 seconds LIVE view recording to either local phone or camera's microSD card. This allows us to capture critical video evidence when we need to.

Recording Resolution

You have the flexibility to choose recording of using either 720P or 1080P resolution in your recording, default is 720P, so this allows you to consider either clearer recording or longer recording option. MicroSD max supported size is 128GB.
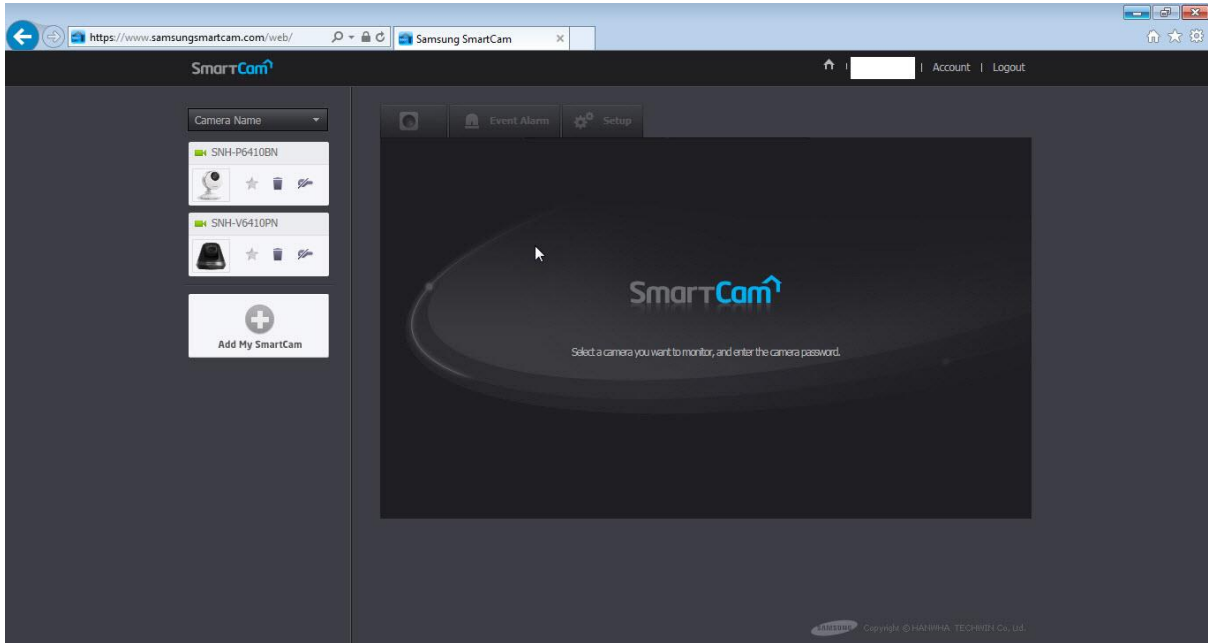
Playback Feature

The Playback module is very easy to use, select the date, and select the Type of recording you are retrieving, and the camera will bring you to an innovative interface that allows you to search for the clips and starts the playback. Upon completion of playback, the APP interface allows you to play the next clip

Web Interface

In an event which your office does not allows you to use your mobile to connect to the WIFI but you have a web-browser, you can still login to the cloud interface to access your cameras

Low Resolution Image over the webUI (To compare, refer to the boxes and objects on the left)

Medium Resolution Image over the webUI (To compare, refer to the boxes and objects on the left)

High Resolution Image over the webUI (To compare, refer to the boxes and objects on the left)

Special Product Features

Privacy Mode

The camera comes with a Privacy Mode which you can set your schedule according to needs, so that the camera will switch off Live viewing, event, alarm and recording features during the privacy timing that you define in the scheduler. This gives you a piece of mind that your room activities are not being broadcast out to the internet if you put one in your bedroom. What you will noticed is that the camera will tilt itself down and position lens downwards to the base

Auto Tracking

This is one feature that I seriously love to talk about, the camera is able to detect motion & audio and tracks the source once you turn this feature on via web or APP. Example; if you have a pet that is hyper active at home, the camera can pick up the motion/audio** and tracks it so that you can see what is going on, which conventional cameras does not have this feature at all. That means no need for Ultra Wide Angles that makes the image curve at the edges and blurs out the quality of the images.

** My effective range is within 3 metres, the closer, the more responsive the tracking is

Motion & Audio Detection

The first of its kind to have both features available in a single camera and have the option to adjust each feature's sensitivity individually according to needs. The motion detection allows you to setup up to 3 ZONES for area detection. A very useful feature to prevent full screen detection (or false alarm)

Image Encryption

Samsung cameras supports encryption of your data over the internet, when you enable the Image encryption, your streaming is encrypted and thus, taken care of the security concern over intercepted transmission over the internet! However, this means a hit on your speed of access since decryption is required.

Wide Dynamic Range

This is one helpful feature on Samsung's cameras, when your surrounding is dark, you can activate the WDR to allow the camera to auto compensate the surround area by doing adjustments to the brightness, etc. So that you can see more clearly, and this feature is extremely helpful when you try to see a person face more clearly against strong sunlight.

Image without WDR enabled. You can see that the area around the SCOOTER wordings are not very visible to some

Image with WDR enabled. You can see now that the image that is against the light are adjusted so that you can see more in details, the bicycle area will show you more details in terms of the decals and wordings on it.

Summary

There is room for improvement. I personally felt that it can be better. For example, to return to previous screen/menu instead of needing the user to press cancel after you save to a screen. Hope Samsung makes improvement over this.

In a nutshell about this camera, an amazing 1080P HD resolution and top notch features packed in a small package. Auto tracking, motion and audio detection alarms, privacy mode for bedrooms, easy to use app, notification, good playback module with easy search function.

The camera is priced at $269, which is equivalent to the US RRP pricing of USD199, full of new features, great playback module and performance stability.

It comes with 2 Years warranty from Convergent Systems (S) P/L, and is available also in Gain City megastore.