

# Samsung Audience Measurement Solution

Anonymous audience analytics solution for Samsung SMART Signage



## Highlights

- Gain insight into customer buying habits and interests economically
- Analyze data anonymously without invasions of privacy
- Increase marketing efficiency with targeted advertising
- Encourage audience participation with engaging content and interactivity

## Reach target audiences more effectively with audience measurement analysis

Obtaining insight into customer spending habits, likes and interests is a valuable tool that can help businesses target promotions accordingly, saving time and money, while increasing their bottom line. However, accurate audience measurement, gathered anonymously and without invading privacy, is not always an easy task - and one of the biggest challenges facing businesses today.

Samsung Audience Measurement is a proprietary audience analytics solution that works in concert with Samsung SMART Signage to gather customer data anonymously. Using this powerful audience analytics tool, businesses can obtain customer-profiling data through face recognition cameras. In turn, business can engage customers with targeted information and encourage them to interact with the displays through fun public opinion questions, polling and more.

## Direct marketing messages to the intended audience with camera recognition

MagicINFO™ Audience Measurement solution included in the Samsung MagicINFO™ Server\* automatically collects customer recognition data with an incredible accuracy rate of 90 percent using the dedicated Samsung CY-SSC5000 camera. The solution includes Dynamic Content Play\*\* feature which enables businesses to display targeted messaging on the SMART Signage to specific audiences. Plus, Data Statistics feature provides statistical data based on time and date along with age, gender and number of viewers.

\* Included in server software versions 3100.2 and higher. Customers who want to use the Audience Measurement solution with earlier server software versions can obtain the upgrade free of charge.

\*\* Dynamic Content Play feature is activated in the server when customer agrees terms and conditions of its usage.

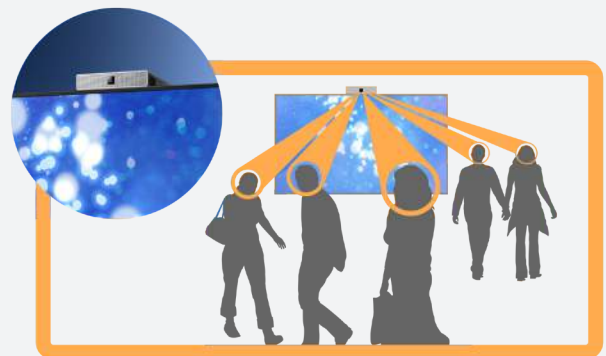


Figure 1. Samsung CY-SSC5000 camera connected to the display automatically captures and collects customer recognition data

# Deliver brand messages to target audiences cost-effectively and without invasion of privacy

Data can be organized by audience and content type played by the hour, day, week or month, along with intuitive graphs and charts. Individual anonymity is protected because the software only uses special algorithms for gender and age recognition without saving the person's image.

## Collect and analyze essential audience data to deliver relevant content

The Samsung Audience Measurement solution works seamlessly with Samsung SMART Signage and the MagicINFO™ Server, with or without a Set-Back Box (SBB). The Samsung CY-SSC5000 camera transmits the real-time video to the Audience Measurement (AM) Engine, which analyzes the recognition results and, in turn, transmits it to the AM Agent, which communicates with the MagicINFO™ Server. The MagicINFO™-i™ Player or the MagicINFO™ Player S3 then plays the targeted message on the SMART Signage display for the intended audience to view right after the current content, as predefined in the targeted audience playlist, which is created in the MagicINFO™ Server.

## Ensure accurate data collection without privacy invasion

When collecting information about individuals through digital signage profiling, one of the biggest concerns is protection of privacy. The Samsung Audience Measurement solution ensures that it only retrieves anonymous information about individuals in order to analyze the characteristics of the audience, not the person's actual identity. To this end, no image files remain in the display or SBB and are purged as soon as the audience analytics are extracted.



Figure 2. Samsung Audience Measurement solution retrieves only anonymous information

## Maximize marketing efficiency with targeted advertising delivered in real time

The Samsung Audience Measurement solution provides two types of modes, audience mode and traffic mode. With the audience mode, the camera captures individuals who have just noticed the advertising or are carefully watching it, and can determine their preference of content by their gender and general age group. The traffic mode analyzes the number of viewers and passersby, saves the data in a cvs format file and then applies the data to the dashboard approximately once or twice a day stored in the Real-time Analytics Dashboard on the server.



Figure 3. The traffic mode analyzes the number of viewers and passersby

## Engage audiences with fun interactive content

When collecting information about individuals through digital signage profiling, businesses can obtain a wealth of data to help them deliver targeted messages directly to their intended audience almost instantaneously.

Content managers can surprise and engage the onlooker further with fun, premade content of interest to the viewer, along with targeted offers to pique their interest in the brand message. Data Statistics can also determine the number of male and female viewers and their ratio, how many passed by the display, and how many reacted and looked at the display. This is an invaluable tool in determining whether the advertising is grabbing audience attention. By reaching target audiences in such a dynamic way, businesses can acquire valuable insight and plan advertising more strategically and economically.

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## Specification



		CY-SSC5000
	Optical size	1/4
<b>Sensor</b>	Physical specifications	FHD (2 M)
	Pixel	16:09
	Aspect ratio	1,920 x 1,080 @ 30 fps (2 M)
	Pixels	57.7 / 34.6
	Angle (horizontally / vertically)	1.2 m
	Focus point	0.8 m ~ ∞
	Focus area	
<b>ISP</b>	White balance control	Auto
	Exposure control	Auto
	Format	H.264
<b>Encoder</b>	Profile	Main / base / high profile
	Resolution	Up to 1,080 P @ 30 fps
	Video bit rate	
<b>Face recognition</b>	Resolution	864 x 486
	Angle (horizontally / vertically)	57.6 / 34.6

\* CY-SSC5000 camera is compatible with  
 - Samsung Set-Back-Box (SBB) with Windows® 7 OS  
 - Samsung SMART Signage with SSSP 3.0.

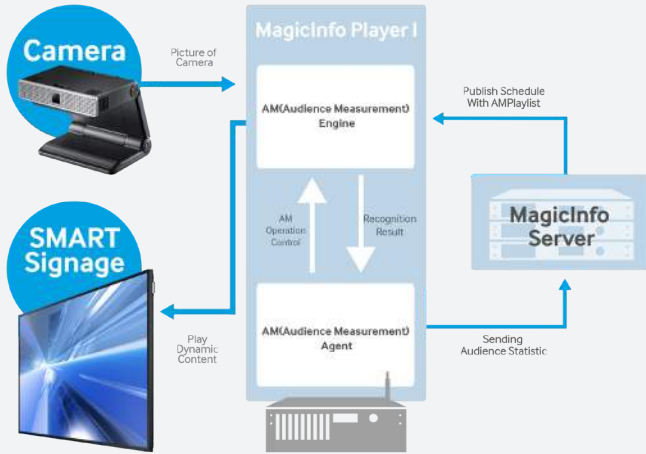
## Traffic Mode and Audience Mode

	Traffic Mode	Audience Mode
<b>Measurement</b>	Number of people in front of camera	Attention & dwell time, Gender, Ages
<b>Camera Installation Height</b>	2.2~2.7m	2.2~2.7m
<b>Recognition Distance</b>	1.5~5m	1.5~5m (Gender, Ages: ~4m)
<b>Maximum Number of Concurrent Recognition</b>	Up to 15	Up to 10

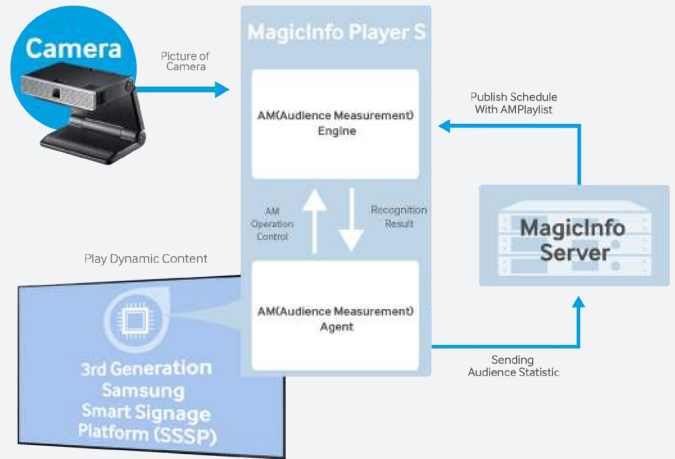
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## System Diagram

When Connected to Set Back Box(SBB)



When Connected to Display



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### For more information

For more information about Samsung Audience Measurement Solution, visit [www.samsung.com](http://www.samsung.com) or [www.samsung.com/displaysolutions](http://www.samsung.com/displaysolutions).

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