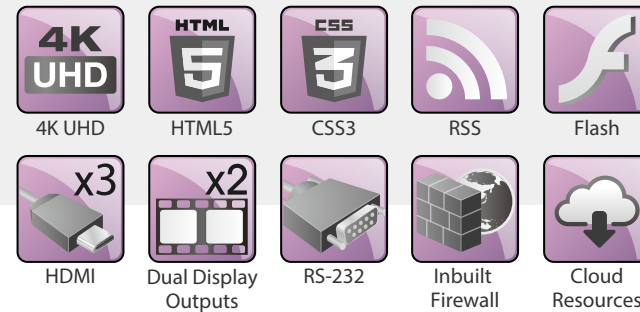




# Compact 4K HDMI Digital Signage Player

## SMP-2300



### Highlights

- Equipped with HDMI outputs for 2 displays
- 3 playback modes: zone-type, individual programs, or playlists
- Support 4K UHD video, YouTube Video, Flash®, HTML5, CSS3, weather, social media, etc.
- Unlimited Video zones, Image zones, and Ticker zones
- Support 4 signal output modes: Single, Clone, Extended, Distinct Modes
- Offer flexible task scheduling based on once, daily, weekly, monthly, or yearly timescales
- Allow self-designed template creation either directly on SMP player or on your PC
- Integrate facial recognition technology to deliver personalized content (requiring QNAP QVR Face Tiger)
- Support 2 LAN ports for advanced management & network security

\*Depending on your video resolution, codec, bitrates and hardware spec.

## Ready-to-use Digital Signage Player

SMP-2300 Digital Signage Player, the industrial-grade hardware, is bundled with dedicated digital signage software, SMP-NEO2, as a complete media player for digital sign applications. SMP-2300 and SMP-NEO2 are optimized to work well together. Not only will you enjoy a seamless user experience, but you can also manage the device remotely from your web browser without installing any additional software.

## HDMI Video Outputs Widely Broadening Applications

SMP-2300 digital signage player can control two screens in both portrait and landscape orientation for most popular or even user-defined resolutions. Moreover, SMP-2300 supports the following four signal output modes:

**A** **Single Mode:** connect to one screen

**A A** **Clone Mode:** present identical contents on two screens

**A B C** **Extended Mode:** link two screens together and present content stretching across two screens

**A B** **Distinct Mode:** present different contents on two screens

## Intelligent and Intuitive Scheduling Management

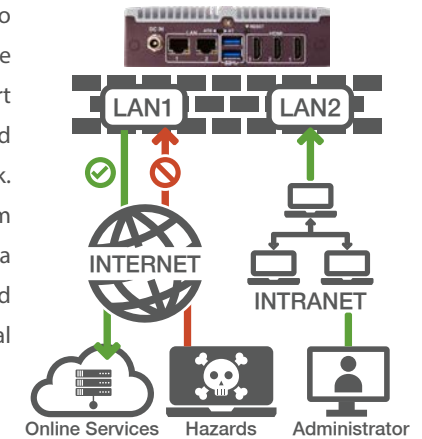
Playback schedules can be arranged in a variety of ways! You can insert a one-time event or arrange periodic tasks based on daily, weekly, monthly or yearly timescales. You can assign a date, a time period, or even a day in a specific week of a month (e.g. 2nd Sunday in May). Location-based scheduling is also doable to largely increase the flexibility.



SMP- provides two viewing modes, calendar and timetable, for you to facilitate schedule management. In addition to editing a schedule directly on an individual SMP media player, you can also choose to centrally control multiple players in groups by a CMS server.

## Dual LAN Ports Collaborate with Firewall Strengthen Security

SMP-2300 digital signage player is equipped with two LAN ports. One port can be used to access the Internet with the inbuilt firewall, while the other port can be used to log into SMP's web-based management interface through a local area network. Administrators can not only avoid the hazards from the internet, but also manage SMP players within a secure LAN. This leading design offers a safer and more flexible network planning for large-scale digital signage projects.



## Built to Convey Instant and Media-rich Messages

SMP-2300 Digital Signage Player supports a variety of multimedia formats including 4K UHD video, YouTube Video, Flash® animation, HTML5 web page, image, music, and text ticker. The player can stream real-time HD video by connecting to a TV tuner, DVD player, or other multimedia devices through an external HDMI capture card (sold separately).

The richness of your digital signage networks goes beyond promotional videos. Other contents such as news, weather, social media, streaming videos and any partial web page can also be easily adapted to enrich your digital signage presentations.



## Easy-to-Use Template Creation in Two Ways

With SMP-NEO2, SMP-2300 Digital Signage Player provides a web-based Skin Editor so that users can perform a drag-and-drop operation to define the size and the location of each zone directly on SMP players. In addition, experienced web designers can also utilize any web-editing tool to create HTML pages with the greatest of flexibility.

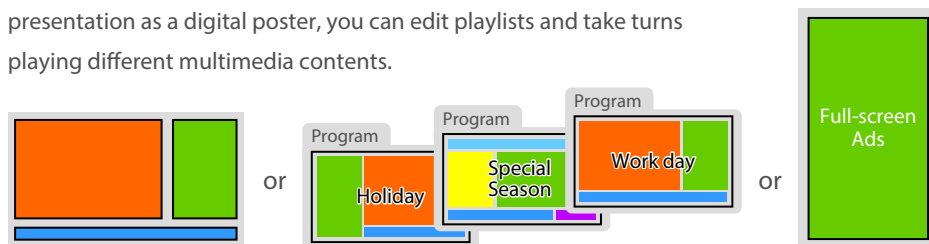


## Engage Customers with Interactive Digital Signage

SMP digital signage players support integration with HID compliant touch panels and multi-touch gestures. Users can tap, swipe, pinch or spread one or two fingers to click, change, zoom in or out web pages. You may also create your own custom gestures to suit your specific needs. Furthermore, SMP players integrate with facial recognition software, QNAP QVR Face Tiger, for advertisers to deliver personalized contents by judging the viewer's age, gender or by the number of viewers and drive customer engagement.

## Powerful Player to Meet Versatile Media Demands

SMP-2300 Digital Signage Player supports three playback modes for all occasions and applications. You can choose to divide the screen into several zones, each of which applies different media with independent schedules and settings. Packing all zones into one program for a special season or holiday is also an option. If you simply want to deliver a full-screen presentation as a digital poster, you can edit playlists and take turns playing different multimedia contents.



## Flexible Platform for Extended Integration

SMP-2300 can be integrated with other external devices to meet requirements from diversified vertical markets. For instance:



### Touch Screen:

easily extend to an interactive digital signage system incorporated with USB HID compliance touch screens.



### Mobile Devices:

use mobile phones or tablets to change playlists



### Web Server & Database:

possess great flexibility to integrate with web servers (RSS, weather, Twitter, etc.) and databases, such as CAYIN xPost.



### Web SDK:

CAYIN Web SDK is a developer-friendly library. You can leverage its powerful functions to create your proprietary management tools via HTTP-based APIs.

## Rich Library and Cloud Resources

All necessary raw materials, including multimedia files, fonts, clocks, skins, programs, and playlists, can be accessed easily in the Library to assist you in organizing resources. Moreover, the system allows you to upload your desired fonts or even to download the latest templates from CAYIN's Cloud service for free to greatly enrich your content.



## System Specifications

System software	SMP-NEO2 v3.0	
Content Creation	Zone type	<ul style="list-style-type: none"> <li>• Able to use CAYIN Skin Editor to create templates either directly on SMP players or on your PC</li> <li>• Display zone: <ul style="list-style-type: none"> <li>• Video zone x 2 (video file/streaming/audio)</li> <li>• HTML zone x 3</li> <li>• Image zone x 2</li> <li>• Ticker zone x 2</li> <li>• Clock zone x 1</li> <li>• Background image x 1</li> </ul> </li> </ul>
	Full-screen	• Use any web-editing tool to create HTML pages with unlimited Video zones, Image zones, and Ticker zones (*Depending on Hardware Spec)
Multimedia Playback	Playback modes	• 3 options: Skin, Program, and Playlist
	Web Pages	<ul style="list-style-type: none"> <li>• Browser: Firefox (v52.8 Linux build)</li> <li>• Web language: support HTML 5<sup>(1)</sup>, JavaScript and RSS/ATOM Feed</li> <li>• Plug-in: Adobe® Flash® Player (V 24, Linux build), CAYIN Media Player (Video and Audio), CAYIN Ticker, CAYIN Image Slideshow</li> <li>• Content: show whole or part of HTML/Flash files, remote URL, weather, social media (e.g. Twitter) or integrate with users' network facilities and databases</li> </ul>
	Streaming Video	<ul style="list-style-type: none"> <li>• CAYIN RTB (MPEG4-TS, MPEG2-TS; bit-rate: 1~5 Mbps)</li> <li>• RTSP (codec: H.264; bit-rate: 1~20Mbps)</li> <li>• RTP (MPEG-2, MPEG-4, bit rate: 1~10 Mbps)</li> <li>• HTTP/MMS</li> </ul>

<sup>(1)</sup> The compatibility is based on the built-in Firefox browser.

Multimedia Playback	Video Files	<ul style="list-style-type: none"> <li>• Format: MPEG (MPG, VOB), AVI (H.264), WMV, MP4</li> <li>• Codec: MPEG-1/2, MPEG-4 ISO, WMV 7/8/9, H.264, H.265(HEVC)</li> <li>• Bit-rate: up to 30Mbps (MPEG2, MPEG4, WMV, H.264) for 1080p, 15Mbps (H.264, H.265) for 4K UHD</li> <li>• Resolution: up to 4K UHD@30HZ</li> </ul>
	Audio Files	<ul style="list-style-type: none"> <li>• Format: WMA, MP3</li> <li>• Codec: MP3, WMA 7/8</li> </ul>
	Image Files	<ul style="list-style-type: none"> <li>• Format: JPEG/GIF/BMP</li> </ul>
	Preview	<ul style="list-style-type: none"> <li>• Playback simulator: image, HTML/Flash, remote URL, and ticker (Note: Simulation is for reference only. Actual display may differ.)</li> <li>• File preview: show thumbnails for image and video files</li> </ul>
	Face Detection	<ul style="list-style-type: none"> <li>• Software: integrate with QVR Face Tiger 1.0.1.0 or later</li> <li>• Layout: show triggered contents in full screen or within a video zone of a skin or program</li> <li>• Playback Content: program, playlist, video, image, and HTML/Flash</li> </ul>
Schedule	Playback	<ul style="list-style-type: none"> <li>• Local &amp; central scheduling: edit schedules directly on an SMP player or centrally control multiple players in groups by a CMS server</li> <li>• View type: calendar or time table</li> <li>• Schedule mode: once, daily, weekly, monthly, yearly, and location</li> <li>• Playback type: able to edit scheduled tasks for each zone or as a full-screen display</li> </ul>
	Screen, volume & system	<ul style="list-style-type: none"> <li>• Set schedules to turn on/off the screen, adjust SMP's volume, or restart the system</li> </ul>
Content Update	Methods	<ul style="list-style-type: none"> <li>• Online (manually): FTP, Network Shares (Network Neighborhood), SMP's Web Manager</li> <li>• Online (automatically): CAYIN CMS server</li> <li>• Offline: USB Storage Device</li> </ul>
System Settings	Language	<ul style="list-style-type: none"> <li>• User Interface: Chinese (Traditional), Chinese (Simplified), English, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Thai</li> <li>• Ticker Support: Unicode (UTF-8) compatible languages; able to use default fonts or upload TTF fonts<sup>(2)</sup>.</li> </ul>

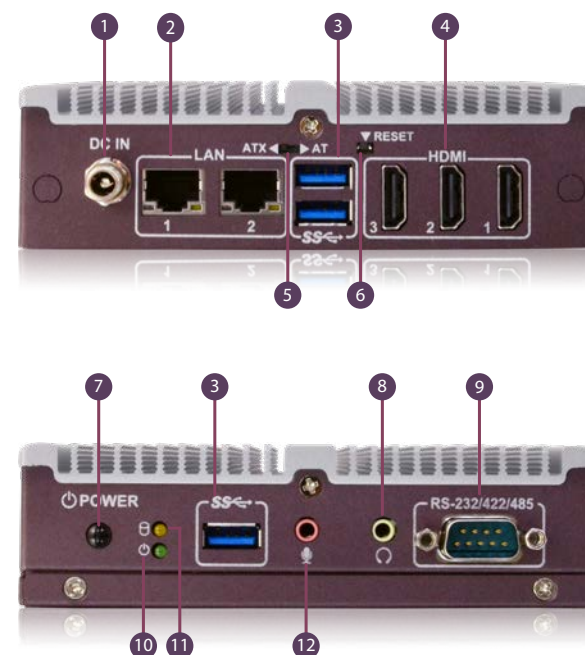
<sup>(2)</sup> CAYIN doesn't guarantee that SMP-NEO2 is compatible with all font files.

System Settings	Display	<ul style="list-style-type: none"> <li>• Screen resolutions: 640x480, 800x600, 1024x768, 1152x864, 1280x720 (720p), 1280x768, 1280x1024, 1360x768, 1366x768, 1600x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200, 1920x1440, 3840x2160 (30Hz, Single/Clone); up to 4096 pixels for one side by User-defined mode</li> <li>• Portrait Mode: Support 90 and 270 degree display rotation</li> <li>• 4 signal output modes: Single, Clone, Extended, Distinct Modes</li> <li>• Support to detect EDID/DDC parameters</li> <li>• Support the screensaver function</li> <li>• Support to incorporate with USB HID compliance touch screen and multi-touch gestures</li> </ul>
	Time	<ul style="list-style-type: none"> <li>• Set system time manually or synchronize the clock from an NTP server</li> </ul>
	Location	<ul style="list-style-type: none"> <li>• Track SMP's current location by GPS or simply show a static location in Google Maps</li> </ul>
Remote Diagnostics and Maintenance	Hardware Monitor	<ul style="list-style-type: none"> <li>• Check CPU temperature and utilization of CPU, system DRAM, and hard drive</li> </ul>
	Log	<ul style="list-style-type: none"> <li>• Create log files recording the system status</li> <li>• Able to purchase SuperReporter 2 to generate advanced playback reports</li> </ul>
	System Update	<ul style="list-style-type: none"> <li>• Automatic notification of patch and firmware updates</li> </ul>
	Self-repair	<ul style="list-style-type: none"> <li>• Able to restart/shutdown/recover the system and backup/restore configurations remotely.</li> </ul>
Network	Protocol	<ul style="list-style-type: none"> <li>• Support static IP and dynamic IP (DHCP)</li> <li>• Support HTTP, HTTPS, SMB, ICMP, RTP, RTSP, MMS, SYSLOG, NTP, FTP</li> <li>• Built-in Firewall Management</li> </ul>
Resources	Cloud-based	<ul style="list-style-type: none"> <li>• Provide templates and materials in Library and Online Resources</li> </ul>
Web Manager	Recommended browsers	<ul style="list-style-type: none"> <li>• IE 11 or later, Chrome 71 or later, Firefox 56 or later</li> </ul>

## Hardware Specifications

CPU	• INTEL® Apollo Lake Dual-Core Processor
Dimension	• 136 (W) x 101 (D) x 38 (H) mm
Weight	• 0.9 Kg
Network	<ul style="list-style-type: none"> <li>• 10/100/1000 Mbps Ethernet x 2</li> <li>• 802.11 b/g/n/ac Wireless controller (optional)</li> <li>• 3G/4G Data Network (optional)</li> </ul>
Internal Storage	• SSD 30GB (Optional Upgrade: up to 256GB)
External Storage	• Supports up to 4TB
Video	<ul style="list-style-type: none"> <li>• HDMI x 3</li> <li>- HDMI 1 &amp; 2 supports video and audio output</li> <li>- HDMI 3 supports video output only</li> </ul>
Audio	<ul style="list-style-type: none"> <li>• Phone Jack (Analog Stereo)</li> <li>• HDMI Audio (Digital)</li> </ul>
Support Video Streaming	• HDMI Capture Card (USB UVC compatible device, Format: MJPG)*
Power	<ul style="list-style-type: none"> <li>• 100~240V AC (with external adaptor)</li> <li>• DC 12V, 3A</li> </ul>
Others	<ul style="list-style-type: none"> <li>• RS-232/ 422/ 485 (COM) x 1</li> <li>• USB 3.0 x 3</li> </ul>
Peripherals	<ul style="list-style-type: none"> <li>• Wall mount bracket x 1</li> <li>(compatible with VESA 75x75/100x100)</li> </ul>
Certificate	• CE, FCC, RoHS, CB, BSMI

\* Please refer to online help for more information.

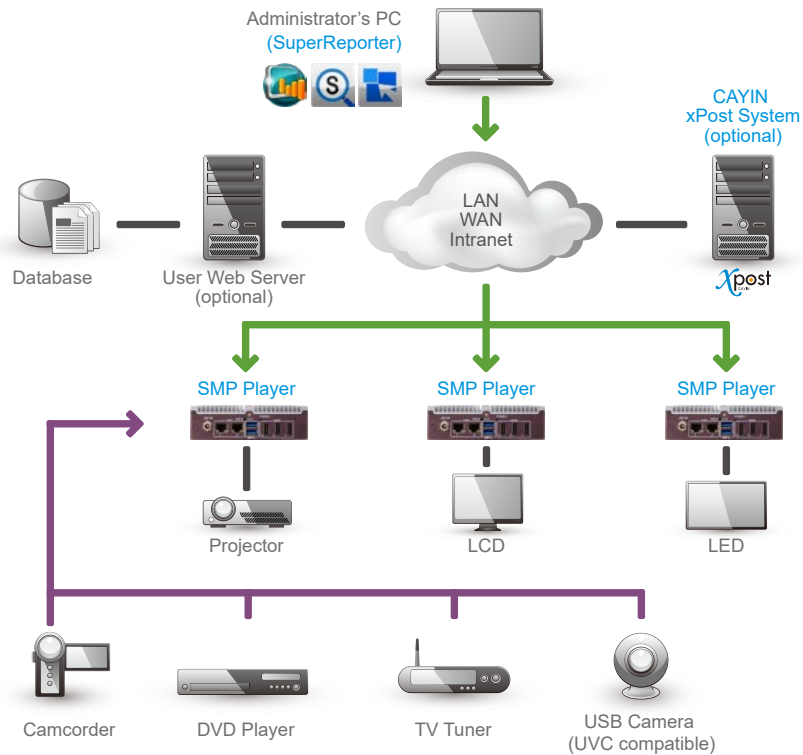


- |  |                        |                      |                                      |
|--|------------------------|----------------------|--------------------------------------|
| 1 Power Connector                              | 2 Ethernet LAN x 2     | 3 USB 3.0 x 3        | 4 HDMI x 3                           |
| 5 ATX / AT Power Switch<br>(function disabled) | 6 Reset Button         | 7 Power Button       | 8 Audio-out                          |
| 9 RS-232                                       | 10 Power Indicator LED | 11 HDD Indicator LED | 12 Microphone<br>(function disabled) |

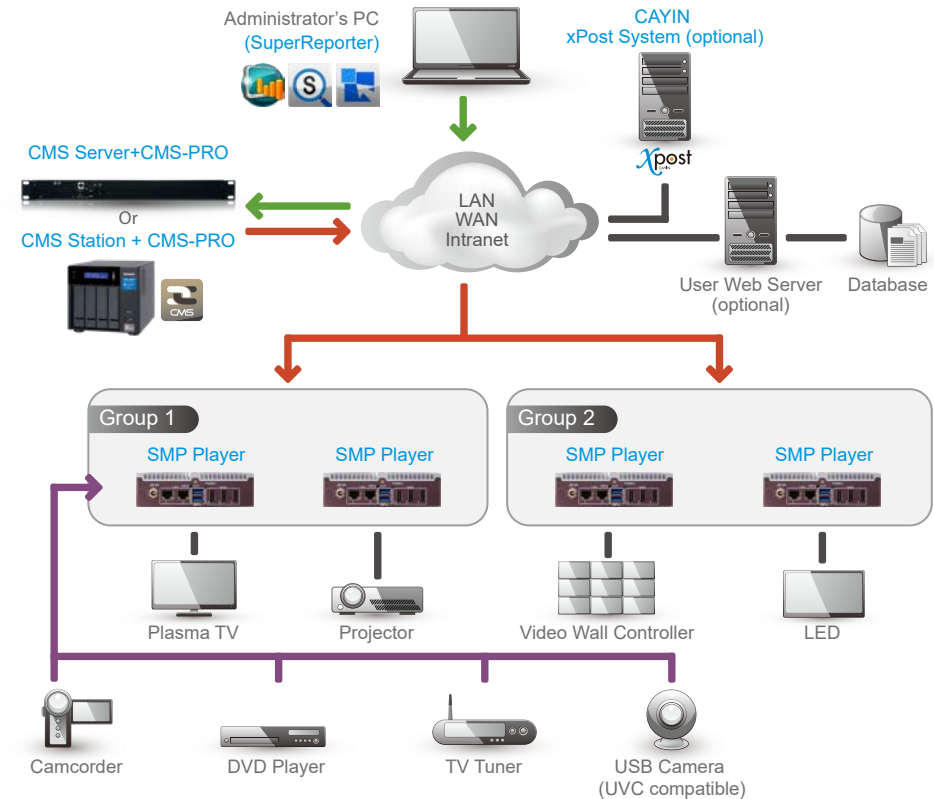


## System Structure

### Networked Standalone Digital Signage Player



### Digital Signage Network with Client-Server Structure (CMS server + SMP player)



← Video Input    
 ← Upload Content / Scheduling    
 ← Distribute Content / Scheduling



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