SMP

SMP-2310

Compact 4K HDMI Digital Signage Player

Product Highlights

- Equipped with HDMI outputs for 3 displays
- 3 playback modes: zone-type, individual programs, or playlists
- Support 4K HDMI video, YouTube Video, HTML5, CSS3, weather, social media, etc.
- Unlimited Video zones, Image zones, and Ticker zones*
- Support 4 signal output modes: single, clone, extended, and distinct
- 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.

⬥ Robustie Solution

The Robustie Solution brilliantly equips industrial-grade hardware and professional software to provide a professional and robust solution to users with diverse project needs. CAYIN SMP players, the core member of the Robustie solution, are designed to work standalone to play programmed content on displays while fulfilling the requirements of smaller-scale digital signage applications.

Built to Convey Instant and Media-rich Messages

SMP-2310 Digital Signage Player supports a variety of multimedia formats including 4K HDMI video, YouTube Video, HTML5 web page, image, music, and text ticker. The player can stream real-time HD video by connecting to a TV tuner, 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.

Ready-to-use Digital Signage Player

SMP-2310 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-2310 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.

Dashboard **Playback** **Schedule** **Skin Editor**

HDMI Video Outputs Widely Broadening Applications

Digital signage player can control 3 screens in both portrait and landscape orientation for most popular or even user-defined resolutions.

4 Signal Output Modes Widely Broadening Applications:

Single Mode:
connect to one screen

Clone Mode:
present identical contents on three screens

Extended Mode:
link two screens together and present contentstretching across three screens

Distinct Mode:
present different contents on three screens

Mobile and Place-Based Digital Signage

SMP-2310 Digital Signage Player can integrate with 4G/3G and GPS technology to provide mobile and location-based solutions. Players installed in moving vehicles can playback contents based on both time and location. Administrators can also locate each player on Google Maps and instantly have an idea of the overall connection status of all media players.
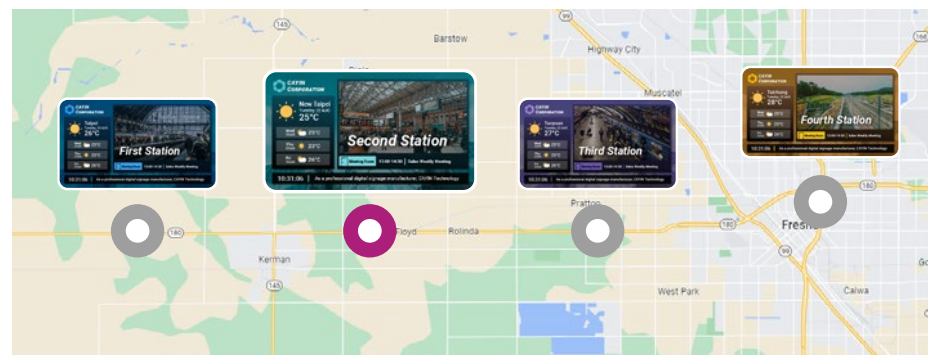
**1st Station** **3rd Station** **4th Station**

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.

The system allows you to upload your desired fonts and even download the latest templates from CAYIN's Cloud service for free to greatly enrich your content.

Easy-to-Use Template Creation in Two Ways

With SMP-NEO2, SMP-2310 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.Through Skin Editor, you can customize the screen resolution to meet your needs, including screen orientation and multi-display setup.
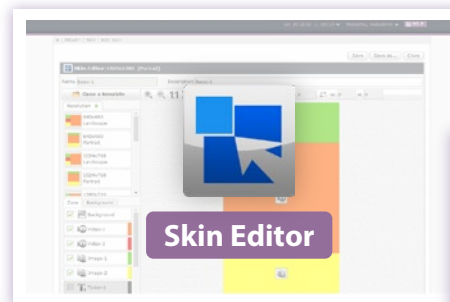
In addition, experienced web designers can also utilize any web-editing tool to create HTML pages for the greatest flexibility.

Skin Editor

Supports
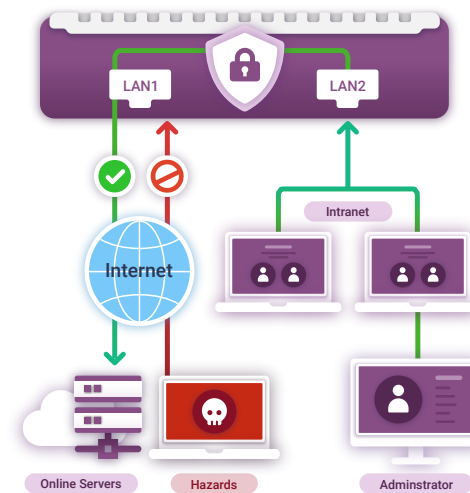
Dual LAN Ports Collaborate with Firewall Strengthen Security

SMP-2310 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.

3 Playback Modes for All Occasions and Applications

You can divide the screen into several zones, each media assigned with independent schedules and settings. If you simply want to deliver a full-screen presentation as a digital poster, you can create playlists to display different multimedia contents in order.
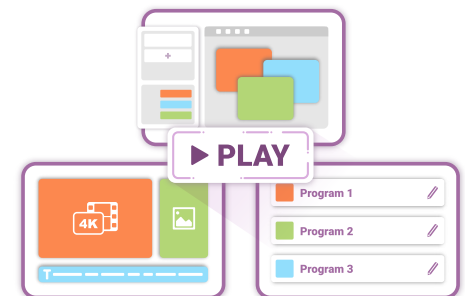
2 Viewing Modes for Playback Scheduling: Calendar and Timetable

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 or central scheduling through a CMS server is also available to increase the flexibility.

Flexible Platform for Extended Integration

SMP-2310 Digital Signage Player can be integrated with other external devices to meet requirements from diversified vertical markets.

- Facial Detection & Digital Signage
- Interactive Digital Signage
- Web Technologies & Digital Signage
- Retail Digital Signage
- Multi Video Output & Video Wall
- Live Feed & Digital Signage
- Location Based Digital Signage
- Smartphone & Digital Signage
- Web SDK
- Personalized Advertising
- Social Media
- Weather

Support Intuitive Multi-Touch Gestures

SMP Digital Signage Player 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. Thus, digital signage can interact with customers in a more intuitive way. You may also create your own custom gestures to suit your specific needs and drive customer engagement.

Scroll | Select items | zoom in or out | Switch between contents
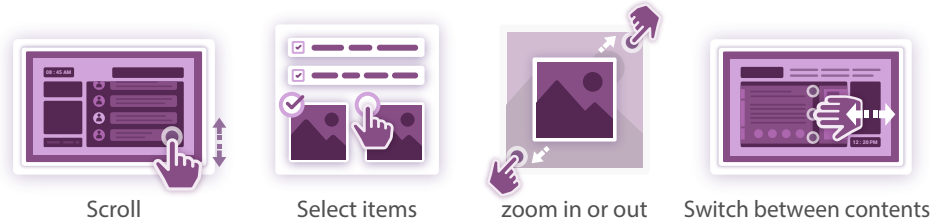
Instant Remote Diagnostics and Preliminary Maintenance

Administrators can perform troubleshooting remotely by retrieving log records and monitoring key operational activities, such as system resource usage, CPU temperature, and network topology. To obtain the optimal performance and functionality, users will be prompted to install patches whenever new software updates are available.
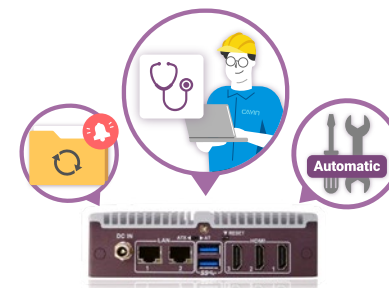
If an abnormal situation occurs, SMP-2310 Digital Signage Player is equipped with a self-repair mechanism to restart the system automatically. Administrators can also restore configurations or recover a system immediately when necessary.

CMS-SE Server

With CMS-SE, administrators can manage players in groups, and perform live video streaming, central scheduling, emergency mode, access right management, and content updates of multiple players simultaneously.

System Specifications

System software	SMP-NEO2 v3.0	

Content Creation	Zone type	• Able to use CAYIN Skin Editor to create templates either directly on SMP players or on your PC
		
		• Display zone:
		
		  • Video zone x 2 (video file/streaming/audio)
		
		  • HTML zone x 3
		
		  • Image zone x 2
		
		  • Ticker zone x 2
		
		  • Clock zone x 1
		
		  • Background image x 1

	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	• Browser: Firefox • Web language: support HTML 5[1], JavaScript and RSS/ATOM Feed • Plug-in: CAYIN Media Player (Video and Audio), CAYIN Ticker, CAYIN Image Slideshow • Content: show whole or part of HTML, remote URL, weather, social media or integrate with users' network facilities and databases
	Streaming Video	• CAYIN RTB (MPEG4-TS, MPEG2-TS; bit-rate: 1~5 Mbps) • RTSP (codec: H.264; bit-rate: 1~20Mbps) • RTP (MPEG-2, MPEG-4, bit rate: 1~10 Mbps) • HTTP/MMS

[1] The compatibility is based on the built-in Firefox browser.

Multimedia Playback	Video Files	• Format: MPEG (MPG, VOB), AVI (H.264), WMV, MP4
		• Codec: MPEG-1/2, MPEG-4 ISO, WMV 7/8/9, H.264, H.265(HEVC)
		• Bit-rate: up to 30Mbps (MPEG2, MPEG4, WMV, H.264) for 1080p, 15Mbps (H.264, H.265) for 4K UHD
		• Resolution: up to 4K UHD@30HZ
	Audio Files	• Format: WMA, MP3
		• Codec: MP3, WMA 7/8
	Image Files	• Format: JPEG/GIF/BMP
	Preview	• Playback simulator: image, HTML, remote URL, and ticker (Note: Simulation is for reference only. Actual display may differ.)
		• File preview: show thumbnails for image and video files
	Face Detection	• Software: integrate with QVR Face Tiger 1.0.1.0 or later
		• Layout: show triggered contents in full screen or within a video zone of a skin or program
		• Playback Content: program, playlist, video, image, and HTML/Flash
Schedule	Playback	• Local & central scheduling: edit schedules directly on an SMP player or centrally control multiple players in groups by a CMS server
		• View type: calendar or time table
		• Schedule mode: once, daily, weekly, monthly, yearly, and location
		• Playback type: able to edit scheduled tasks for each zone or as a full-screen display
	Screen, volume & system	• Set schedules to turn on/off the screen, adjust SMP's volume, or restart the system
Content Update	Methods	• Online (manually): FTP, Network Shares (Network Neighborhood), SMP's Web Manager
		• Online (automatically): CAYIN CMS server
		• Offline: USB Storage Device
System Settings	Language	• User Interface: Chinese (Traditional), Chinese (Simplified), English, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Thai
		• Ticker Support: Unicode (UTF-8) compatible languages; able to use default fonts or upload TTF fonts[2] .

[2] CAYIN doesn't guarantee that SMP-NEO2 is compatible with all font files.

System Settings	Display	• 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 • Portrait Mode: Support 90 and 270 degree display rotation • 4 signal output modes: Single, Clone, Extended, Distinct Modes • Support to detect EDID/DDC parameters • Support the screensaver function • Support to incorporate with USB HID compliance touch screen and multi-touch gestures
	Time	• Set system time manually or synchronize the clock from an NTP server
	Location	• Track SMP's current location by GPS or simply show a static location in Google Maps
Remote Diagnostics and Maintenance	Hardware Monitor	• Check CPU temperature and utilization of CPU, system DRAM, and hard drive
	Log	• Create log files recording the system status • Able to purchase SuperReporter 2 to generate advanced playback reports
	System Update	• Automatic notification of patch and firmware updates
	Self-repair	• Able to restart/shutdown/recover the system and backup/restore configurations remotely.
Network	Protocol	• Support static IP and dynamic IP (DHCP) • Support HTTP, HTTPS, SMB, ICMP, RTP, RTSP, MMS, SYSLOG, NTP, FTP • Built-in Firewall Management
Resources	Cloud-based	• Provide templates and materials in Library and Online Resources
Web Manager	Recommended browsers	• IE 11 or later, Chrome 71 or later , Firefox 56 or later

Hardware Specifications

CPU	• INTEL® Apollo Lake Dual-Core Processor
Dimension	• 136 (W) x 101 (D) x 38 (H) mm
Weight	• 0.9 Kg
Network	• 10/100/1000 Mbps Ethernet x 2 • 802.11 b/g/n/ac Wireless controller (optional) • 3G/4G Data Network (optional)
Internal Storage	• SSD 30GB (Optional Upgrade: up to 256GB)
External Storage	• Supports up to 4TB

Video	• HDMI x 3
	  - HDMI 1 & 2 supports video and audio output
	  - HDMI 3 supports video output only

Audio	• Phone Jack (Analog Stereo) • HDMI Audio (Digital)
Support Video Streaming	• HDMI Capture Card (USB UVC compatible device, Format: MJPG)*
Power	• 100~240V AC (with external adaptor) • DC 12V, 3A
Others	• RS-232/ 422/ 485 (COM) x 1 • USB 3.0 x 3
Peripherals	• Wall mount bracket x 1 (compatible with VESA 75x75/100x100)
Certificate	• CE, FCC, RoHS, CB, BSMI

* Please refer to online help for more information.
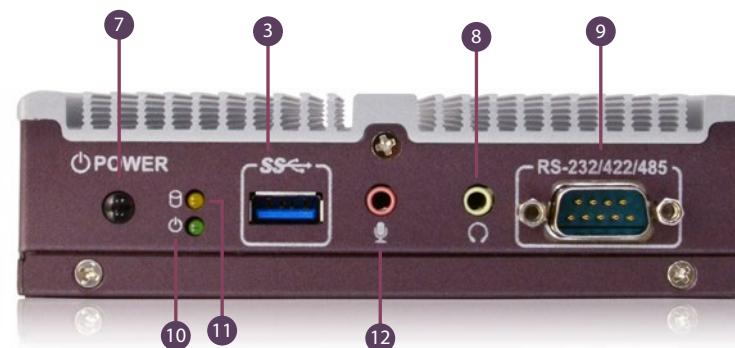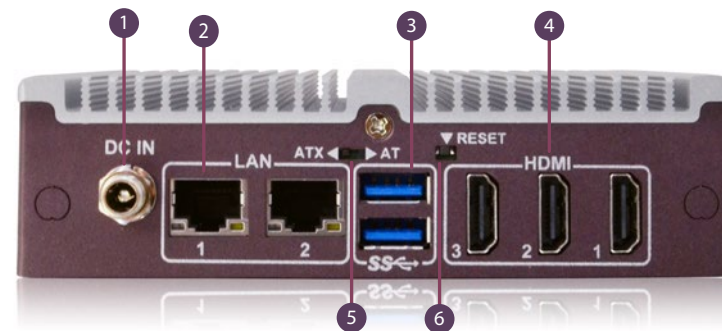
1 Power Connector	2 Ethernet LAN x 2	3 USB 3.0 x 3	4 HDMI x 3
5 ATX / AT Power Switch (function disabled)	6 Reset Button	7 Power Button	8 Audio-out
9 RS-232	10 Power Indicator LED	11 HDD Indicator LED	12 Microphone (function disabled)

System Structure

Networked Standalone Digital Signage Player
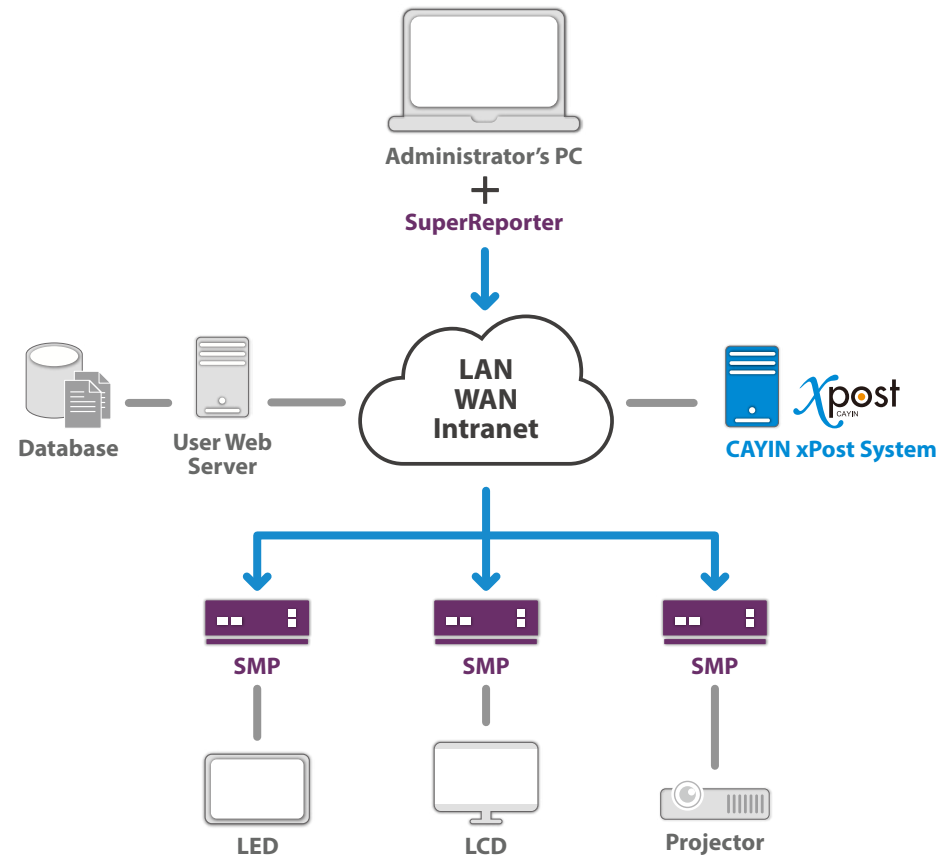
Digital Signage Network with Client-Server Structure (CMS server + SMP player)

Administrator's PC
+
SuperReporter

Database **User Web Server**

LAN WAN Intranet

CAYIN xPost System

SMP **SMP** **SMP**

LED **LCD** **Projector**

Administrator's PC
+
SuperReporter

CMS-SE/CMS-60
+
meetingPost+

LAN WAN Intranet

CAYIN xPost System

User Web Server **Database**

LED

TV Wall

Group1
SMP
SMP

Group2
SMP
SMP

LCD

Projector

⟵ **Distribute Content / Scheduling**   ⟵ **Upload Content / Scheduling**