# **Business Digital Signage**

	Product Description, Components, Options and Contractual Parties
Product Name	Business Digital Signage
Product Description	Sunrise Business Digital Signage is a solution that redefines how businesses communicate and engage with their audience and consists of a player together with specific software and a content management system ("CMS") (" <b>Product</b> " and " <b>Services</b> ").
	This Product and Services combine software for high-resolution displays with advanced content management capabilities, enabling dynamic, real-time updates, and interactive features. Customers are able to seamlessly deliver targeted messages, promotional content, and essential information, all customized to meet specific needs and preferences.
	The Product and Services support a wide range of media formats, offering flexibility and creativity in content design. It enables integration with various systems, such as point of sale (POS), customer relationship management (CRM), and social media platforms and allows for a cohesive and impactful user experience. Whether for retail environments, corporate settings, or public spaces, Sunrise GmbH digital signage solution offers the perfect blend of innovation, efficiency, and engagement.
	The Product and Services contain of the following components:
	<ul> <li>License (two types of licenses are available to be chosen by the Customer: BASIC LICENSE and PRO LICENSE)</li> <li>Content Management System (CMS): ARYA Cloud</li> <li>Player (hardware) (five different types of players are available to be chosen by the Customer depending on functionalities and budgets)</li> <li>Secure Operating System on the players: DSOS</li> <li>Option Packages (available for the PRO LICENSE only)</li> </ul>
	For all detailed information regarding the Product and Services, please also see the Terms of Service and the End-User License Agreement (" <b>EULA</b> ").
	By using the Products and Services, the Customer and any person acting through him may upload, or permit the upload of, content, information or materials to the Services (" <b>Content</b> "). Customer grants SpinetiX a non-exclusive, worldwide, royalty-free, and revocable license to use, reproduce, display, and modify the Content solely to the extent necessary to perform the Services under this Contract.

Product Components: Specifications of the Players and Licenses

#### Players (Hardware) ("Players"):

Depending on the needs, the Customer can choose from five different players:

- HMP400: 1 HDMI output, up to 4K resolution, PoE, no WiFi
- HMP400W: 1 HDMI output, up to 4K resolution, PoE, WiFi
- iBX410: 1 HDMI output, up to 4K, no PoE, no WiFi
- iBX410W: 1 HDMI output, up to 4K, no PoE, WiFi
- iBX440: 4 HDMI outpus, up to 8K, no PoE, no WiFi

For further technical specifications regarding the Players, please see chapter "Technical Specifications" below.

#### **Licenses** (Software):

The Customer can choose between two licenses:

**BASIC LICENSE**: The ARYA Basic license provides access to core content management system (CMS) functionalities, making it the perfect entry-level option for those beginning their digital signage journey. For more ARAY Content Management System highlights, please see the chapter below.

#### **Key Features:**

- 1 GB of secure cloud storage for hosting images, videos, and PDF files.
- 9 professionally designed templates (both horizontal and vertical) to support quick and easy content creation.
- Unlimited screen connections, enabling users to expand their digital signage network without restriction.
- Up to 10 players
- 1 single user

**PRO LICENSE:** The ARYA Pro license provides a robust foundation for scalable, secure, and efficient signage operations within organisations. For more ARAY Content Management System highlights, please see the chapter below.

### Key Features:

- Unlimited users with comprehensive permission management.
- 10 GB of cloud storage per player for enhanced content hosting capacity.
- 12 customizable templates, including alert and overlay formats.
- Audio file and playlist support, plus compatibility with HTML5 content (with the widget option).
- Content, player, and user tagging for advanced organization and control.
- Priority scheduling and smart content synchronization for efficient updates.
- Video wall configuration made easy with the SpinetiX iBX440 player.
- Player monitoring, reporting, and Audit Trail logs for system transparency.
- Advanced integrations with SpinetiX Elementi software (Feature Set or extended Enterprise plan required).

### **Additional Options for both BASIC and PRO LICENSE:**

- Single Sign-On (SSO) integration.
- Batch Setup for streamlined deployment.

Each of those options available for both BASIC and PRO LICENSE at a separate price to be provided by Sunrise upon Customers' request.

# ARYA Content Management System (CMS)

### **Highlights of the CMS ARYA Cloud:**

- Completely hosted on AWS infrastructure. Nothing to be installed in Sunrise Datacenters or Customers' sites.
- Multi-tenant-server. All Customer are hosted in the same infrastructure.
- Visual, ergonomic, and intuitive
- Content preview
- SaaS mode
- Web Frontend
- AWS " Serverless " infrastructure, GDPR, C5, ISO 27001:2013
- Multi-user and multi-role
- Unlimited number of users for the Pro license. One user for the base license Compatibility with SSO (single sign on)
- Multi-tags, Media Tags, User Tags, Player Tags
- Smart synch (intelligent and automatic publication by Tags)
- Automatic turning on and off screens (detection of absence of content to be published) reduction of the energy bill.
- Pair a media player with the cloud in less than 2 minutes
- Monitoring and asset management (notifications, firmware updates, reporting, etc.)
- Media ingest, transcoding, media storage, media publication and asset management.
- Templates, Customization, Apps, Creation.
- Auto-adaptation of templates in horizontal or vertical format
- Content in "Alerts" mode for specific evacuation or fire messages based on building scenarios.
- Schedule and priority content.
- Online help chat with dedicated team.

Product Components: Option Packages (for PRO LICENSE only) and other Options (at separate costs and separate Customer request)

#### **Option Packages:**

**WIDGETS**: The Widgets Feature Set enables playback of content created using the SpinetiX Elementi professional authoring tool. It empowers users to design and deliver high-impact, data-driven content that keeps audiences informed and engaged.

#### Key Features:

- Full compatibility with Elementi-created content.
- Access to a comprehensive library of dynamic widgets for real-time data visualization (e.g., weather, news, social media, metrics).

**KIOSK**: The Kiosk Feature Set builds upon the Widgets Feature Set, expanding its capabilities to support advanced interactive and HTML-based content. It is designed for environments that require engaging, touch-enabled user experiences.

#### Key Features:

- Includes all Widgets Feature Set functionalities.
- Adds support for advanced HTML content in Elementi.
- Enables creation and playback of interactive content for touchscreen displays.

**SYSTEMS**: The Systems Feature Set is the most advanced option, incorporating all capabilities of the Kiosk Feature Set and adding powerful tools for complex, large-scale digital signage deployments.

#### Key Features:

- Includes all Kiosk Feature Set functionalities.
- Multiscreen synchronization and video wall support for immersive visual experiences.
- Custom resolution management for non-standard or specialized display configurations.
- IPTV and streaming support, enabling integration of live video feeds.

Seamless integration with third-party systems such as queue management, room reservation, and other enterprise applications.

# Contractual Parties and Technology Partner

Sunrise is the Customer's sole contractual partner. However, Sunrise is entitled to have the Products and Services provided one or more technology partners ("**Technology Partner**"), in which case the latter shall not become parties of this Contract with the Customer. As of the date of this Factsheet, SpinetiX SA ("**SpinetiX**") is used as Technology Partner and supplier of the Products and Services.

All pre-existing or newly created intellectual property rights (copyrights, patent rights, trademark rights, etc.) relating to Sunrise's Products and Services remain exclusively with Sunrise and/or the Technology Partner.

Sunrise is also entitled, at its own discretion and in its own decision, to replace the Technology Partner during the term of this contract and to have the Products and Services provided by itself or by another Technology Partner.

**Product Packages, Prices and Payment Terms** 

#### Standard Packages

Standard Packages are limited to **10 players maximum** per Customer:

- Business Digital Signage S, includes:
  - 1 to 10 iBX410W Player(s)
  - Basic License(s) (per Player)

Price: CHF 1'010.00 per Player ("One-Time Fee") and CHF 5.00 / month per License ("License Fee")

- Business Digital Signage M, includes:
  - 1 to 10 iBX410W Player(s)
  - Pro License(s) (per Player)

Price: CHF 1'010.00 per Player ("One-Time Fee") and CHF 38.00 / month per License ("License Fee")

- Business Digital Signage L, includes:
  - 1 to 10 iBX410W Player(s)
  - Pro License(s) (per Player)
  - Widgets Feature Set

Price: CHF 1'825.00 per Player (including Widgets Feature Set) ("One-Time Fee") and CHF 38.00 / month per License ("License Fee")

### All prices are in CHF and exclusive of taxes, duties and fees.

The One-Time Fee is billed after the Activation Date. The License Fee is billed monthly in advance. In the first billing month, in addition to the One-Time Fee and the monthly License Fee for the current billing month, the monthly License Fee for the second billing month will also be charged.

### Custom Set-ups

Custom Set-ups with more players and/or different combinations with regard to players, licenses as well as additional options and Option Packagesare available. In this case,a personalised offer is provided by Sunrise after Customer needs assessment and solution components selection.

For such Custom Set-ups, prices will be customised to Customer's needs and specified in the respective offer.

#### Warranty for SpinetiX Players (Hardware / Players)

#### General

Sunrise integrates Product and Services provided by SpinetiX. For the provided Product and Services, including but not limited to hardware, software, receivers and end devices, the warranty of SpinetiX applies exclusively. To the extent permitted by law, Sunrise excludes any warranty for the Product and Services of SpinetiX, even as these are part of the Services offered by Sunrise. Sunrise shall assign to the Customer any claims against SpinetiX. Repairs are the responsibility of the Customer, unless otherwise stated in this Contract.

Except as expressly set forth in this Contract, Products and Services are provided on an "as is" basis, and SpinetiX makes no warranties except the Warranty in this Contract of any kind, whether express, implied, statutory, or otherwise, including without limitation any implied warranties of merchantability, satisfactory quality, fitness for a particular purpose, non-infringement, or that the operation of Product and Services will be uninterrupted or error-free. In addition, the Customer acknowledges that the proper functioning of SpinetiX Products and Services depends, in part, on third-party technologies, systems, operating systems, and network configurations, which may cause errors or failures. Any changes, interruptions, or instability affecting such third-party products or services may materially and adversely affect, or completely prevent, End Customers' use of or access to Products and Services. The Customer further acknowledges that during such periods, access to Products and Services may be limited or unavailable, with or without prior notice to End Customer.

#### Hardware Standard Warranty

SpinetiX manufactures the Players from parts and components that are new or equivalent to new in accordance with industry-standard practices. SpinetiX warrants to the Customer in accordance with the following provisions that Players, purchased by the Customer from Sunrise, will be free from defects in materials, workmanship and design affecting normal use, for 36 months from the date of invoice to you from Sunrise ("Standard Warranty").

#### Hardware Extended Warranty

The extended warranty, where available, extends the Standard Warranty for an additional 24 months from the last day of the Standard Warranty period ("**Extended Warranty**") and is available upon request of the Customer for the following players, if all additional requirements are fulfilled:

- (a) HMP400 and HMP400W
- (b) iBX410 and iBX410W
- (c) iBX440

The Extended Warranty, is available:

- (d) if the Extended Warranty is purchased by the Customer within 60 days of the Customers' (original) purchase of the Player(s) to which it relates at a specific fee provided by Sunrise upon Customers' request;
- (e) if the Customer provides to Sunrise the original sales receipts of the applicable Player(s) prior to purchase; and
- (f) if Sunrise confirms that the Extended Warranty can be granted to the Customer and the Player(s) that form part of the Customers' request.

In addition, an Extended Warranty is only valid if Sunrise issues to the Customer an Extended Warranty certificate which contains:

- (g) the serial numbers and the date of purchase for (each of) the Player(s) covered by the Extended Warranty; and
- (h) the date of purchase of the Extended Warranty.

The Extended Warranty is in addition to, and shall not in any way affect, any of the Customers' statutory, contractual dealer warranty or other rights.

### Repair or Replacement

Players for which proper Standard Warranty or Extended Warranty claims are made, will, at SpinetiX's option, be repaired or replaced free of charge. SpinetiX shall own any replaced Players and all parts removed from repaired Players. SpinetiX uses new and reconditioned parts made by various manufacturers in performing repairs and building replacement Players. SpinetiX is not liable in any respect for, nor does it provide, any installation or re-installation service in respect of any repaired or replaced Players.

The Customer's sole and exclusive remedy against SpinetiX and Sunrise under the Standard Warranty and any Extended Warranty is for the repair of the applicable Players or their parts (or, at SpinetiX's discretion, replacement of the Players or any defective part or parts thereof). No other remedy, including, without limitation, any claim for incidental or consequential damage or loss of whatsoever nature, shall be available to the Customer.

#### **Exclusions**

These warranties, including any Extended Warranty, do not apply to, and under no circumstances shall Sunrise or SpinetiX bear any liability for any physical or other damages whether to persons or to equipment of any kind, which may have resulted directly or indirectly from, misuse of the players, defects from improper or inadequate installation, use or maintenance, actions or modifications by unauthorized third parties or the Customer, or accidental or wilful damage. These warranties (Standard Warranty and Extended Warranty) do not apply to the external power supply unit nor the internal memory medium.

#### Making a claim

To make a claim, the Customer must first contact Sunrise who will then inform the Customer of its return material authorisation procedure/warranty claim procedure to follow. SpinetiX is not able to accept returns or provide replacement or repaired Players direct to Customers who purchased the Players from Sunrise (however SpinetiX will honour any valid warranty claim from Sunrise).

Sunrise has the right to reject the warranty claim if the Customer does not follow and fully cooperate with its return material authorisation procedure. To make a claim under an Extended Warranty, the Customermust provide a copy of the original invoice covering the purchase of the applicable Players and the Extended Warranty Certificate, if applicable.

### **Warranty for SpinetiX Software and Services**

#### General

Sunrise integrates Product and Services provided by SpinetiX. For the provided Product and Services, including but not limited to hardware, software, receivers and end devices, the warranty of SpinetiX applies exclusively. To the extent permitted by law, Sunrise excludes any warranty for the Product and Services of SpinetiX, even as these are part of the Services offered by Sunrise. Sunrise shall assign to the Customer any claims against SpinetiX. Repairs are the responsibility of the Customer, unless otherwise stated in this Contract.

Except as expressly set forth in this Contract, Products and Services are provided on an "as is" basis, and SpinetiX makes no warranties except the Warranty in this Contract of any kind, whether express, implied, statutory, or otherwise, including without limitation any implied warranties of merchantability, satisfactory quality, fitness for a particular purpose, non-infringement, or that the operation of Product and Services will be uninterrupted or error-free. In addition, the Customer acknowledges that the proper functioning of SpinetiX Products and Services depends, in part, on third-party technologies, systems, operating systems, and network configurations, which may cause errors or failures. Any changes, interruptions, or instability affecting such third-party products or services may materially and adversely affect, or completely prevent, End Customers' use of or access to SpinetiX Products and Services. The Customer further acknowledges that during such periods, access to SpinetiX Products and Services may be limited or unavailable, with or without prior notice to End Customer.

#### **Limited Warranty**

The Customer has a Return Right according to the End-User License Agreement (EULA). In addition, the End-User License Agreement (EULA) and the Terms of Service apply.

	General
Support	<ul> <li>An online chat is availabe on ARYA CMS interface. The chat is managed by humans, and the team is available to answer questions between 7am and 12am CET every day. This chat is to be used for general usage questions.</li> <li>A wiki is available 24/7 and contains all necesseray technical information: https://support.spinetix.com/wiki/Main Page</li> <li>General questions: Please contact your personal advisor or call 0800 555 554.</li> <li>Technical phone support at 0800 550 020</li> <li>Level 1-Support is provided by Sunrise hotline as stated above.</li> <li>Level 2-Support and Level 3-Support are provided by our Technology Partner, however Sunrise is the unique communication channel for the Customer, hence the coordination with the Technology Partner is managed by Sunrise.</li> <li>Support is provided on best effort basis.</li> </ul>
Contract Structure, Appendices and Applicable Provisions	This Product Description/Factsheet together with an order from the Customer (signed offer, individual contract) and together with the following appendices and applicable provisions, form together the "Contract" with the Customer.  The appendices in their current version form an integral part of the Contract (available at: <a href="https://www.sunrise.ch/business/en/solutions/cloud/digital-signage">https://www.sunrise.ch/business/en/solutions/cloud/digital-signage</a> and shall be applied in the agreed order in the event of contradictions. A Management Summary sent at the same time is not part of the contract.  Appendices and applicable terms:  Individual contract (Order form / signed Offer) Factsheet Business Digital Signage Terms of Service End-User License Agreement (EULA) General Terms and Conditions for Business Customers of Sunrise GmbH (available at <a href="https://www.sunrise.ch/business/en/leqal">www.sunrise.ch/business/en/leqal</a> )
Data Protection	Sunrise shall not be liable for any loss, breach, or corruption of data arising from or in connection with the use of this product or related services. This exclusion applies to all forms of data, whether stored, transmitted, or processed, and covers any direct, indirect, incidental, or consequential damages, including costs of data recovery or restoration. Customers are solely responsible for implementing appropriate backup, security, and integrity measures for their data. The General Terms and Conditions for Business Customers, the EULA and the Terms of Service apply.  The Customer acknowledges and agrees that its personal data (Company name, Company details, contact person, contact detail) will be transmitted to Technology Partner to the extent necessary for the provision of the Products and Services.
Price adjustments	Sunrise has the right to change the price with at least thirty (30) days' prior written notice to the Customer.
Website	More details and application examples can be found at: https://www.sunrise.ch/business/en/solutions/cloud/digital-signage
Last updated	November 2025

# **Technical Specifications – Players**

### SpinetiX iBX410 and iBX410W players

### **Connectors and ports**

video	HDMI 2.0b
USB Port	3x USB 3.1
Serial port	RS-232 via special RJ45 accessory cable (not included)
Network	Ethernet 2.5GbE, IEEE 802.3bz, IEEE 802.3ab, IEEE 802.3u, IEEE 802.3az. iBX410W (with Wi-Fi module): Wi-Fi IEEE 802.11a/b/g/n/ac Wave 2, 2x2 MIMO
Power supply	12V DC, 60W, power connector is lockable, power supply included

### Size and Weight

Size	Width: 7.13"/ 181mm, height: 0.85" / 21.5mm, depth: 4.84" / 123mm
Weight	840 g

### **DSOS (Digital Signage Operating System)**

DSOS™	Lightweight, high performance and secured operating system designed for digital signage enabling by default SpinetiX ARYA $^{\text{TM}}$ CMS
OS security	Cryptographically signed firmware packages, local access to OS restricted, Intel™ Boot Guard protection, Secure Boot
Optional features	Different optional modes of use to be activated on top of the built-in SpinetiX ARYA™ CMS

### **Player Engine**

Layer composition	Multi-layer, multi-video decoding capability, video with alpha channel
Fonts	Built-in fonts (including Noto fonts) for any language. In addition, any custom font can be uploaded. Support for TrueType/OpenType fonts
Content languages	HTML5, SVG Tiny 1.2+
Scripting language	JavaScript (ECMAScript 5), jSignage™, WebStorage, XMLHttpRequest
External data access	AJAX, REST, HTTP/HTTPS with custom certificates or SRP, raw TCP/UDP

### **Formats**

Images	JPEG, PNG, GIF, SVG, PDF/A
Media file formats	MPG, MP4, M4V, M4A, MOV, MKV, MKA, WMV, WMA, AVI, VOB, TS, MP3, AAC, WAV
Video codecs	Multi-video decoding capable, 4K60p 4:4:4, H.264/MPEG-4 AVC: HP@L5.2, H.265/MPEG-H HEVC: L5.1, MPEG-2: MP@HL, MPEG-4: ASP, WM9/VC-1: AP@L3, MJPEG
Audio codecs	AAC-LC, HE-AAC, MPEG Layer I, II, III (MP3), WMAv2, AC3
Data feeds	Built-in RSS app, Elementi feeds RSS, ICS, CSV, TXT, custom feeds (XML, JSON, JavaScript)

# **Displays**

Video	DCI 4K (4,096×2,160), 4K UHD (3840x2160), 1080p (1920x1080), custom resolutions, etc.
Audio	Up to 8 channel digital audio over HDMI, stereo analog output, stereo analog input (function not available in current DSOS versions)
Control	DVI-D style Display Power Management signaling, Serial port (advanced protocols, accessory required)

### Network

Protocols	DHCP, static IP, Zeroconf, IPv4, IPv6, NTP, Bonjour, SSDP, SNMPv1/v2c, HTTP/HTTPS, TLS-SRP, user root certificates, WebDAV, FTP, RTSP, RTP/UDP, 802.1x
Remote configuration	Built-in HTTP server, HTTPS with user root certificates, RPC

# Storage

Internal	Industrial 128 GB SSD
External	Hard disk (via USB 3.1)

### Characteristics

Processor	Intel™ Atom x6211E
Memory	RAM: 8 GB DDR4-3200
Operating temperature	Ambient range 32 - 104°F / 0 - 40°C, Relative humidity 10-90% non-condensing
Real-time clock (RTC)	Accuracy ±1 min./month, battery backed
Usage	Commercial-grade robust, fanless, ultra flat and compact design for 24/7 operation
IP code	IP40
Misc.	Mounting brackets included

# SpinetiX HMP400 and HMP400W players

### **Connectors and ports**

video	HDMI 2.0 (lockable) or DisplayPort 1.2 (USB-C lockable alternate mode)
USB Port	3x USB 3.0 (USB-C lockable)
Network	Ethernet 1GbE, IEEE 802.3ab, IEEE 802.3u, IEEE 802.3az. HMP400W (with Wifi module): Wi-Fi IEEE 802.11a/b/g/n/ac Wave 2, 2x2 MIMO
Power supply	Power over Ethernet (PoE+/802.3at) or USB-C lockable Power Delivery 2.0, 27W (min 3A@9V)

### Size and Weight

Size	Width: 7.87" / 200mm, height: 1.1" / 28mm, depth: 4.72" / 120mm
Weight	660g

# **DSOS (Digital Signage Operating System)**

DSOS™	Lightweight, high performance and secured operating system designed for digital signage enabling by default SpinetiX ARYA™ CMS
OS security	Cryptographically signed firmware packages, local access to OS restricted, Intel $^{\rm TM}$ Boot Guard protection, Secure Boot
Optional features	Different optional modes of use to be activated on top of the built-in SpinetiX ARYA $^{\text{TM}}$ CMS

### **Player Engine**

Layer composition	Multi-layer, multi-video decoding capability, video with alpha channel
Fonts	Built-in fonts (including Noto fonts) for any language. In addition, any custom font can be uploaded. Support for TrueType/OpenType fonts
Content languages	HTML5, SVG Tiny 1.2+
Scripting language	JavaScript (ECMAScript 5), jSignage™, WebStorage, XMLHttpRequest
External data access	AJAX, REST, HTTP/HTTPS with custom certificates or SRP, raw TCP/UDP

### **Formats**

Images	JPEG, PNG, GIF, SVG, PDF/A
Media file formats	MPG, MP4, M4V, M4A, MOV, MKV, MKA, WMV, WMA, AVI, VOB, TS, MP3, AAC, WAV
Video codecs	Multi-video decoding capable, 4K60p 4:4:4, H.264/MPEG-4 AVC: HP@L5.2, H.265/MPEG-H HEVC: L5.1, MPEG-2: MP@HL, MPEG-4: ASP, WM9/VC-1: AP@L3, MJPEG
Audio codecs	AAC-LC, HE-AAC, MPEG Layer I, II, III (MP3), WMAv2, AC3
Data feeds	Built-in RSS app, Elementi feeds RSS, ICS, CSV, TXT, custom feeds (XML, JSON, JavaScript)

# **Displays**

Video	DCI 4K (4,096×2,160), 4K UHD (3840x2160), 1080p (1920x1080), custom resolutions, etc.
Audio	Up to 8 channel digital audio over HDMI / DisplayPort / USB-C, stereo analog audio (line level, accessory required)
Control	HDMI-CEC, DisplayPort, serial port (advanced protocols, accessory required)

### Nework

Protocols	DHCP, static IP, Zeroconf, IPv4, IPv6, NTP, Bonjour, SSDP, SNMPv1/v2c, HTTP/HTTPS, TLS-SRP, user root certificates, WebDAV, FTP, RTSP, RTP/UDP, 802.1x
Remote configuration	Built-in HTTP server, HTTPS with user root certificates, RPC

# Storage

Internal	16 GB solid state, eMMC 5.1 Industrial MLC NAND with OS in higher endurance SLC area $$
External	Hard disk (via USB 3.0)

### Characteristics

Processor	Intel™ Atom x5-E3930
Memory	RAM: 4 GB, LPDDR4-2400
Power consumption	Typical 9W; MAX: 14W
Operating temperature	Accuracy ±1 min./month, backup by supercap (30 days)
Real-time clock (RTC)	All components rated for 24/7 - 10 years operation, fanless sealed design. Engineered in Switzerland and made in Germany
Usage	All components rated for 24/7 - 10 years operation, fanless sealed design. Engineered in Switzerland and made in Germany
IP code	IP40

# SpinetiX iBX440 player

### **Connectors and ports**

video	4x HDMI 2.0
USB Port	3x USB 3.1 10 Gbps, 1x USB 2.0
Serial port	RS-232 via special RJ45 accessory cable (not included)
Network	2x Ethernet 1GbE, IEEE 802.3ab, IEEE 802.3u, IEEE 802.3az. (port 2 reserved for local diagnostics)
Power supply	12V DC, 84W, lockable

# Size and Weight

Size	Width: 7.90" / 200.8mm, height: 1.62" / 41.2mm, depth: 5.48" / 139.3mm
Weight	1.8kg / 3.7lbs

# **DSOS (Digital Signage Operating System)**

DSOS™	Lightweight, high performance and secured operating system designed for digital signage enabling by default SpinetiX ARYA™ CMS
OS security	Cryptographically signed firmware packages, local access to OS restricted, Intel $^{\text{TM}}$ Boot Guard protection, Secure Boot
Optional features	Different optional modes of use to be activated on top of the built-in SpinetiX $ARYA^TM$ CMS

# **Player Engine**

Layer composition	Multi-layer, multi-video decoding capability, video with alpha channel, 8K60p 4:4:4, 4x4K60p 4:4:4, 4x4K60p HDR 4:2:0
Fonts	Built-in fonts (including Noto fonts) for any language. In addition, any custom font can be uploaded. Support for TrueType/OpenType fonts
Content languages	HTML5, SVG Tiny 1.2+
Scripting language	JavaScript (ECMAScript 5), jSignage™, WebStorage, XMLHttpRequest
External data access	AJAX, REST, HTTP/HTTPS with custom certificates or SRP, raw TCP/UDP
Multi-player synchronization	Sub-millisecond-accurate synchronization across multiple players

### **Formats**

Media file formats	JPEG, PNG, GIF, SVG, PDF/A, MPG, MP4, M4V, M4A, MOV, MKV, MKA, WMV, WMA, AVI, VOB, TS, MP3, AAC, WAV
Video codecs	Multi-video decoding capable, 8K60p, H.264/MPEG-4 AVC: HP@L5.2, H.265/MPEG-H HEVC: Main 10@L6.1, MPEG-2: MP@HL, MPEG-4: ASP, WM9/VC-1: AP@L3, MJPEG, AV1 Main@L6.1
Audio codecs	AAC-LC, HE-AAC, MPEG Layer I, II, III (MP3), WMAv2, AC3, Opus
Data feeds	Built-in RSS app, Elementi feeds RSS, ICS, CSV, TXT, custom feeds (XML, JSON, JavaScript)

# Displays

-	
Video	Up to 4 fully synchronized outputs, 4K UHD (3840x2160), 1080p (1920x1080), custom resolutions, HDR capable.
Audio	Up to 8 channel digital audio over HDMI, stereo analog output (line level)
Control	Serial port (advanced protocols, accessory required)
Output limitations	All displays must have the same orientation and use the same video mode

### Nework

Protocols	DHCP, static IP, Zeroconf, IPv4, IPv6, NTP, Bonjour, SSDP, SNMPv1/v2c, HTTP/HTTPS, TLS-SRP, user root certificates, WebDAV, FTP, RTSP, RTP/UDP, 802.1x
Remote configuration	Built-in HTTP server, HTTPS with user root certificates, RPC

# Storage

Internal	Industrial 128 GB SSD
External	Hard disk (via USB 3.1)

### Characteristics

Processor	Intel® Core™ I5-1145G7E
Memory	RAM: 2x 8GB DDR4-3200
Operating temperature	Ambient range 32 - 113°F / 0 - 45°C, Relative humidity 10-90% non-condensing
Real-time clock (RTC)	Accuracy ±1 min./month, battery backed
Usage	Commercial-grade robust, external fan design for 24/7 operation. Made in Taiwan.
IP code	IP30