

The Atona **AT-OME-SR21** is an HDBaseT receiver and 4K/UHD scaler with a local HDMI input. Part of the **Omega™ Series** of integration products for modern AV communications and collaboration, the OME-SR21 receives HDBaseT for video up to 4K/60 4:2:0, plus embedded audio, control, Ethernet, and USB over distances up to 330 feet (100 meters). The HDMI input supports video up to UHD/60 4:4:4. The OME-SR21 is HDCP 2.2 compliant and features 4K/60 upscaling and downscaling with frame rate conversion. Additionally, it receives USB over HDBaseT and includes a USB 2.0 hub for integration with PCs, cameras, microphones, speakers, DSPs, and touch or interactive displays. The OME-SR21 is ideal for 4K presentation applications with Omega, HDVS-200, or UHD-EX Series transmitters, as well as Atona AV presentation switchers with HDBaseT outputs, local HDMI sources, and the Gain™ Series amplifiers.

## Versatile scaler, switcher, and extender

The OME-SR21 combines the benefits of 4K/UHD scaling, auto-switching for HDBaseT and HDMI inputs, integrated display control, USB extension, and more. It incorporates many popular integration convenience features, while delivering excellent performance and value for 4K presentation and video conferencing applications. The OME-SR21 can remotely power an Atona HDBaseT transmitter through Power over Ethernet (PoE). For additional integration convenience, the OME-SR21 features audio de-embedding, integrated two-port Ethernet switch, contact closure ports for controlling a motorized screen or display lift, internal video test patterns for setup and troubleshooting, and remote management with **AMS (Atona Management System)**.

## Automatic Display Control

The OME-SR21 can provide control to a display through TCP/IP, RS-232, or CEC\*, without the need for a separate control system. This simplifies system design and integration while reducing costs. With automatic display control, the OME-SR21 can trigger a display to power on automatically whenever a laptop or other device is connected to the OME-SR21. At the end of the presentation, when the presenter disconnects the laptop, the OME-SR21 forces the display to power off. Ease of presenter interaction with the system, and the savings incurred by automatic display shutdown provide a significant return on investment. The OME-SR21 display control capability can also be triggered by an external control system.

*\* Consumer Electronics Control (CEC): Atona does not guarantee the function of CEC with all televisions. We can confirm proper operation with many current Samsung, Panasonic, Sony, and LG TVs. Many manufacturers do not support the CEC "off" command when sent from a source and older TVs use proprietary commands. Atona only supports those TVs that follow CEC command structure from HDMI 1.2a and support the "off" command when issued by a source. We encourage any dealer to get evaluation product from Atona prior to designing a system around this control technology or be prepared to use other methods to control their displays if Atona CEC is not compatible with the installed displays.*

## Reliable Auto-Switching

The OME-SR21 automatically selects an input source based on detection of the 5 volt hot plug detect (HPD) signal, as well as active video. This ensures reliable auto-switching operation for all video sources, including DVRs, DisplayPort / Mini DisplayPort adapters, and other devices that always maintain the HPD line at the 5 volt "high" state but may not be delivering active video.

## Applications

- **Complete system integration** – The OME-SR21 and an Omega Series switcher / transmitter provide a compact, yet comprehensive and cost-effective integration solution.
- **Larger system applications** – The OME-SR21 is ideal for extending AV and control, from a switcher in an equipment rack to a remote display. Built-in 4K scaling optimizes content for 4K and HD displays.
- **Video conferencing** – With a compatible Omega switcher / transmitter, USB extension makes the OME-SR21 ideal for soft codec and web-based conferencing applications, with the ability to integrate with PCs, cameras, speakerphones, and microphones.

## Product Compatibility

The OME-SR21 is not compatible with the Atona HDVS-300 system for USB extension.

## Technical Features

### HDBaseT receiver with local HDMI input

- Two-input switcher with HDBaseT and HDMI inputs
- HDMI input is ideal for a wireless gateway, PC, video conferencing codec, or media player installed near a display

### Video, audio, power, and data over category cable utilizing HDBaseT technology

- Receives up to 330 feet (100 meters) @ 1080p with CAT5e/6 or 4K/UHD using CAT6a/7 cable
- Uses easy-to-integrate category cable for low-cost, reliable system installation

### Audio de-embedding

- De-embeds two channel PCM audio from any video source to a balanced, analog audio output
- Independent volume and mute controls for embedded and de-embedded two-channel PCM audio, plus five-band EQ for the analog audio output

### Multi-channel audio compliant

- Passes through multi-channel audio formats from the HDMI or HDBaseT inputs
- Supports PCM, Dolby® Digital, Dolby Digital Plus™, Dolby TrueHD, Dolby Atmos®, DTS® Digital Surround™, DTS-HD Master Audio™, and DTS:X®

#### USB 2.0 interfacing and extension\* up to 330 feet (100 meters)

- USB type B interface for connection to a host PC, plus two USB type A ports for peripheral devices such as cameras, soundbars, or touch displays
- Provides an ideal USB integration solution for software video conferencing and other applications
- \* *Maximum 120 Mbps data rate supported over HDBaseT.*

#### 4K/UHD capability @ 60 Hz with 4:4:4 chroma sampling for HDMI input and output

- HDBaseT input supports 4K/UHD @ 60 Hz with 4:2:0 chroma subsampling
- HDMI input supports UHD @ 60 Hz with 4:4:4 chroma sampling

#### HDCP 2.2 compliant

- Adheres to latest specification for High-bandwidth Digital Content Protection\*
- Allows protected content stream to pass between authenticated devices
- \* *HDBaseT transmitter or switcher must also be HDCP 2.2 compliant.*

#### Advanced 4K/UHD scaling with selectable frame rate conversion

- Ensure optimal image presentations with optimization settings and internal test patterns
- Selectable pass-through mode (scaler bypass mode) for 1:1 image output
- Ability to upsample incoming 4:2:0 video to 4:2:2 or 4:4:4 (for displays that do not support 4:2:0)

#### 4K/UHD downscaling and upscaling

- Preserves color and spatial detail when down-converting 4K content to 1080p or vice versa
- Ideal for presentation applications where content is to be viewed on a variety of 4K and HD displays
- Also ideal for downscaling to 1080p for hardware video conferencing codecs

#### Aspect ratio control

- The aspect ratio of the video can be adjusted to a desired presentation viewing format
- Aspect ratio options include Fill (content fills the display), and Follow (keep original aspect ratio)

#### Advanced motion-adaptive deinterlacing for 1080i input signals

- Optimizes presentation of 1080i source content such as television broadcasting
- Frame conversion for 1080i interlacing and de-interlacing

#### Internal video test patterns for setup, calibration, and troubleshooting

- Includes color bars, crosshatch, and grayscale
- Test patterns facilitate setting up displays, validating system performance, and diagnosing image display or signal connectivity issues

#### Local AC powering – PoE (Power over Ethernet) source

- Supplies industry standard IEEE 802.3af PoE over HDBaseT to an Omega™ Series transmitter
- Allows convenient transmitter installation at any remote location, without the need for local AC power

#### Automatic display control

- Automatically changes display power state based on active or standby mode of the scaler. Control signals to display are transmitted via IP, RS-232, or CEC.
- Enables display and volume control. CEC enables control of consumer displays (as supported by the display manufacturer).
- Includes an adjustable lamp cooldown mode to avoid prematurely powering up a projector after shutdown
- Eliminates the need for a complex AV control system

#### Automatic input selection using hot plug detect and video detection technology

- Selects active input when sources are connected or if there is a change in source power status
- Enables simplified, automatic system operation without user intervention

#### EDID management

- Manages EDID communications with the source through a display's EDID or internally stored EDID
- Ensures desired audio formats and video resolutions are provided to the AV system

#### HDCP management

- Automatically reports HDCP compliance status to the source based on the sink device
- HDCP compliance can also be disengaged through AMS or a control system
- Allows non-protected material from PCs to pass to non-compliant displays, streaming devices, and teleconference systems; protected content is not transmitted
- Displays a green splash screen as visual confirmation that protected content is being blocked from transmission to a non-compliant display

#### Intuitive GUI-based configuration using integrated web server

- Offers menu-based configuration of device settings including network access, input switching, signal processing, display control, HDCP and EDID management, and more
- Allows fast configuration of internal product settings and troubleshooting from a mobile device or PC in the field

#### TCP/IP and RS-232 control

- Flexible control options for compatibility with the Atlona **Velocity™** control system, as well as other third-party control systems
- Reduces integration time and costs

#### Dual Ethernet ports and integrated network switch

- Allows a single connection to an AV LAN for IP control of a display and the OME-SR21 (plus transmitter or switcher over HDBaseT)
- Simplify system design and integration with just one network drop for AV system control

#### Two relays provide control for motorized screen, shades, or display lift

- Contact closure triggers electronic screen or lift operation based on active or standby mode of the switcher / scaler
- Automates screen or lift activation at system power-up; eliminates need for a separate AV control system

#### Easy to configure and manage with AMS (Atlona Management System)

- Centralized, network-based configuration and management of Atlona IP-controllable products and systems
- Manage configuration and firmware updates for AV devices spanning a facility, building, enterprise, or residence
- Available as a cost-effective **server appliance**, or a **free software download**

#### Field-updatable firmware

- Device can be updated in the field via AMS or the web GUI
- USB port also available for firmware updates

#### Front panel power and signal status LEDs

- LED indicators provide power and HDBaseT link status information
- Provides local, convenient setup and troubleshooting when network access is not available

#### Low-profile, 1.02 inch (26 mm) high enclosure

- Easy installation into confined spaces behind displays and above projectors
- Rack-mountable with the optional **AT-RACK-1RU** rack shelf

#### Included accessories

- Installation guide, surface mounting hardware, and external universal power supply

#### Award-winning 10 year limited product warranty

- Ensures long-term product reliability and performance in commercial and residential systems
- Specify, purchase, and install with confidence