# AvediaPlayer Receiver r9300

# Datasheet

Delivers advanced network video decoding capabilities across a wide range of resolutions up to 1080p60 for superb image quality. Compared to previous models, it typically delivers a 20% reduction in power consumption, making it an economical choice for enterprise video display systems.

### Highlights

- Simply plug and play with Power over Ethernet (PoE), built in firmware, and automatic channel discovery.
- Full support for IPTV streams up to 1080p60, outperforming standard set-top boxes, to deliver very high quality playback for demanding video environments.
- 20% reduction in power consumption over previous versions, meaning more efficient and reduced total lifetime cost of ownership.
- PoE simplifies installation and saves on the cost of cabling and power points.
- User options include a built-in user interface, access to fully customizable Artio or third party middleware.
- Enhanced setup of receiver end user language and font customization. Receiver TV user interface language and font options can be centrally set up by the administrator to precisely match the end user's language.
- Playback of content protected by HDCPv2.2 or SecureMedia.

# **Technical Specifications**

#### Video Output

HDMI v1.4b (with HDCP): 1080p,1080i, 720p (50Hz/59.94Hz/60Hz),
 576p, 576i (50Hz), 480p, 480i (59.94Hz/60Hz)

#### **Audio Output**

- HDMI: 2 or 6 Channel PCM or Bitstream
- TOS: 2 Channel PCM or Bitstream

#### Video Decoding

- MPEG-4 part 10 H.264 (ISO/IEC 14496/10)
- MPEG-2 (ISO/IEC 13818-2)
- Resolutions:
- 240p, 360p, 480i, 480p 576i, 576p, 720p, 1080i and 1080p @ 50Hz, 59.94Hz or 60Hz

#### Audio Decoding

- MPEG-1 Layer II (ISO/IEC 11172-3)
- AC3/EAC3
- AAC/HE-AAC
- Downmixes multi-channel audio to stereo

#### Streaming

- MPEG 2 Transport Stream (ISO/IEC 13818-1)
- RTP, UDP
- IP multicast, IP unicast
- IGMPv2/v3
- Video On-Demand: RTSP, HTTP

## USB 2.0 Port

- Can be used for external storage, keyboard or mouse
- USB hot plug enables auto-mounting of USB devices

#### **Content Protection**

- Decryption of HDCPv2.2 protected content
- Decryption of SecureMedia DRM protected content (live streams and VoD). SecureMedia Server and client license required.

#### **Channel Management**

- Automatic channel discovery from all Exterity head end equipment
- SAP/SDP announcements
- Channel access control
- XML channel lists
- Static channels
- Hidden channels
- Playlists
- Channel redundancy
- Channel failover to playlist, channel or web page

#### Infra-red/Control Options

- Built-in IR receiver
- 3.5mm jack for IR extender or tethered remote control
- IR Keyboard and third party remote controls supported
- TV control via Serial RS232 or HDMI CEC
- Remote IR control of Exterity Encoder AV sources

#### System

- CPU: ST40-300 650MHz
- RAM: 512MB
- Flash: 128MB (for firmware and configuration)
- OS: Linux 3.4.xx





#### **Built-in User Interface**

- Channel selection menu
- Volume control
- Audio Language control
- DVB Subtitles (ETSI EN 300 743)
- Closed captions (CEA-608 captions embedded in CEA- 708 data)
- Teletext
- Internationalization support

#### **Integrated Web Browser**

- ANT<sup>®</sup> Galio for integration with Exterity and third party middleware
- HTML 4.01, XHTML 1.0, HTTP 1.1, CSS 2.1, CSS 3 partial support
- Remote Event Support (HTML 5), JavaScript 1.5, DOM Level 2, XML, AJAX
- Unicode and international languages (Western, Greek, Russian and Arabic)
- JavaScript API for control of device configuration and media playback
- Image formats: png, jpeg, gif and bmp

#### Management

- Fully integrated with all Exterity management tools
- Network administration via HTTP web interface/SNMP/Telnet/SSH
- Serial RS232 Admin Port
- Terminal Control Interface (TCI)
- Event logging via Syslog (local and remote)
- Firmware upgrade via TFTP

AvediaPlayer Receiver

- Configuration backup/restore via TFTP
- Secure Mode option to lock down receiver access if required

#### **Additional Features**

- Video wall fine control of display to allow the creation of video walls using receivers, includes wall position control and TV bezel compensation.
- Unit-to-unit sync Multiple receivers showing the same TV channel automatically synchronize video and audio to one video frame.
- Low Latency Sub 500ms system latency between Exterity Encoders and Receivers in full multicast IPTV environments.

#### **Options**

A wide range of optional accessories are available (see Exterity website for details):

- TV, desk and secure mounting brackets
- IR and wired remote controls and extenders
- Power supplies for non-POE environments
- SecureMedia DRM protected content playback license
- HDCPv2 protected content playback license

#### Protocols

IP (RFC791), UDP (RFC768), TCP (RFC793), ARP (RFC826), DNS (RFC1035), DHCP (RFC2131), ICMP (RFC0792), IGMP v3 (RFC 3376), TFTP (RFC1350), HTTP (RFC2616), Telnet (RFC854), Syslog (RFC3164), NTP (RFC1305), SAP (RFC2974), SDP (RFC4566), RTP (RFC3550), RTSP (RFC2362), SNMPv1/v2c (RFC1157/RFC1901)

#### Regulatory

• CE, FCC, C-Tick compliant

EMC:

exterity

- EN55022: 2010, 47CFR: 2011 Part 15, Sub Part B (FCC)
- EN55024: 2010

#### Safety

- IEC 60950-1:2005 (Ed 2.0), AM1:2009, AM2:2013
- EN 60950-1:2006, A11:2009, A1:2010, A12:2011, A2:2013

#### Weiaht

• 0.4 kg

#### **Environment**

- Operating temperature: 0 ...+40°C / +32 ... +122°F
- Storage temperature: -20 ...+70°C / -4 ... +158°F
- Operating Relative Humidity: 5 95% (non-condensing)

#### Power

- DC Jack (24V): 5W typical, 8W maximum
- POE IEEE 802.3af PD (48V): 5W typical, 8W maximum

#### MTBF

• Calculated to MIL-HDBK-217F, notice 2: 126295 hours (14.4 years)

**The Receiver Development Kit (RDK)** enables Exterity partners to integrate their own solutions with third party applications and back end components, such as middleware. Third party applications can control the Exterity receiver using any or a combination of the TCI, Simple Network Management Protocol (SNMP) interface, JavaScript API and Native application support (DirectFB based development environment).

United Kingdom Headquarters t: +44 (0) 1383 828 250 f: +44 (0) 1383 824 905

w : www.exterity.com e : info@exterity.com

HQ Edinburgh, UK. Regional offices in Atlanta, Dubai, Hong Kong, Johannesburg, London, Munich and Paris.

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Status     Network     Channel Learning     Authentication     Resources     Maintenance	This page provides information on the current play state of the receiver, stream information and HDMI status. Currently Playing											
		Number	Name	Source		URI Vie		Video	ideo Audi			
		Unknown			udp://239.192.101.54:5000			video	Au	10		
Logging		Audio			Subtitle			Teletext				
Receiver  Playback  Settings Browser  Remote TV Control Encryption Mounting		Tracks	PIDs	Cont Errs	Tracks	PIDs	Cont Errs		Tracks	PIDs	Cont Errs	
		Track1	4352	1	No data available		N		o data ava	ailable		
		Video			Stream Errors RTP 1							
		PID	Co	nt Errs			TEI	_				
Failover		4113		0	0		0					
	TV:		San	nsung (1658)								
	Play State:		Stre	Stream lost, PAT/PMT not found								
	Output Format:		108	1080p60 (59.94Hz) (Detected video mode)								
	Video Decoder Status:		Aud	Audio Only								
	HDMI/HDCP Status:		Auti	Authentication has succeeded (Transmitting Frames)								
	HDMI EDID Status:			9 supported video modes detected								

#### Network

- Linux IPv4 stack
- DHCP or Static IP addressing
- IEEE 802.3u 10/100Mbps MDIX Ethernet

#### • IEEE 802.3af PD