

# ATSC 3.0 Receiver Decoder

ARD 3100 & ARD 3400



The ATSC 3.0 terrestrial broadcast standard is quickly being deployed and the need to decode these new off-air signals in a professional receiver decoder platform is paramount.

Sencore's ARD 3000 series of ATSC 3.0 receiver decoders enables users to decode one channel (ARD 3100) or four channels (ARD 3400) in a 1RU appliance. This decoder is perfectly suited for re-encode or confidence monitoring applications in existing distribution systems.

The ARD 3000 series includes an ATSC 3.0 RF input for receiving the next-generation RF signal. The user can tune to an ATSC 3.0 signal and decode up to four services. Demodulated ALP IP ATSC 3.0 streams can also be received. Decoded services are output via 4x3G-SDI for UHD services or 3G/HD/SD-SDI for HD and SD services. Unit configuration is done using the intuitive web GUI or through APIs like REST and SNMP.

## ATSC 3.0 Re-Encode

Receive ATSC 3.0 RF/IP signals, decode and output SDI to existing encoding workflows. Carry ATSC 3.0 channels in existing distribution systems.

## ATSC 3.0 Confidence Monitoring

Receive ATSC 3.0 RF/IP signals and decode UHD, HD and SD services to SDI for monitoring on broadcast monitors.

## SPECIFICATIONS

### INPUT

Input Type	ATSC 3.0 via RF ATSC 3.0 Linklayer Protocol (ALP) via IP
RF Connector Type	75ohm F Connector
RF Frequency Range	42 to 870 MHz
RF Sensitivity	-20 to 30 dBmV
IP Connector Type	RJ-45 1 Gbps
Container Formats	ROUTE-DASH, MMT

### DECODER

Video Codec:	HEVC M422-10P@HT up to L5.1
Video ES Bitrates	ARD 3100 up to 60Mbps ARD 3400 up to 60Mbps cumulative across all services
Output Formats	3840x2160 @ 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 1920x1080p @ 23.97, 24, 25, 29.97, 30, 50, 59.94, 60 1920x1080i @ 25, 29.97, 30 1280x720p @ 50, 59.94, 60 720x480i @ 29.97
Number of Audio Services	8 audio services (16 audio channels) per video
Audio Codecs Supported	Dolby AC-4
Output Formats	Digital Pass-through PCM Downmix or Discrete for 5.1 Sources
Closed Captions	ATSC A/343, CEA-608/708

### OUTPUT

Ports	4x 3G-SDI, 75-Ω HD-BNC 1x Genlock Input, 75-Ω HD-BNC
Physical layer	3G-SDI: SMPTE 424M HD-SDI: SMPTE 292M SD-SDI: SMPTE 259M
Quad Link 3G-SDI	Two-Sample Interleave

### MANAGEMENT

Connector	RJ-45 1 Gbps
Protocols	HTTP and SNMP
User Interfaces	Full control via web GUI
Automation Interfaces	Full status and control via SNMP Configurable SNMP traps Restful API Syslog message logging
Firmware Updates:	Via web GUI

## ORDERING INFO

ARD 3000	Base Software
ARD 3100	1xRF In, 1xUHD/HD/SD Decode, 4xSDI Out, 1x Genlock
ARD 3400	1xRF In, 1xUHD or 4xHD/SD Decode, 4xSDI Out, 1x Genlock