advanced media technologies®

MODEL

DSR-7400 HD SERIES

COMMERCIAL INTEGRATED SATELLITE RECEIVER
ULTRA HIGH DENSITY HD/SD TRANSCODER

ARRIS

PRODUCT OVERVIEW

The DSR-7400 HD Series is ARRIS's next generation commercial satellite receiver/transcoder platform engineered for cost-effective ultra high density transcoding. Available models include the DSR-7403 with capacity for 3 HD and 3 SD transcoded outputs, DSR-7406 with capacity for 6 HD and 6 SD transcoded outputs and DSR-7412 with capacity for 12 HD and 12 SD transcoded outputs.

Support for HEVC and MPEG-4 video compression inputs combined with DVB-S2, DVB-S2x and 8PSK Turbocode demodulation enables full compatibility with the latest satellite distribution networks. The flexibility offered by 4 active RF tuners with retune capability simplifies satellite network design and permits trouble-free network modifications.

The DSR-7400 HD Series comes equipped with industry standard input and output interfaces such as dual GigE and ASI that enable seamless connections to headend equipment. The density of the DSR-7400 HD Series creates both headend rack space and power consumption savings compared to traditional single-channel transcoding receivers.

DSR-7400 HD Series Commercial Integrated Satellite Receiver
Ultra High Density HD/SD Transcoder

KEY FEATURES

- DSR-7403 provides 6 transcoded output services (3 HD and 3 down-converted SD)
- DSR-7406 provides 12 transcoded output services (6 HD and 6 down-converted SD)
- DSR-7412 provides 24 transcoded output services (12 HD and 12 down-converted SD)
- Simultaneously receives transport streams from up to 4 satellite transponders (single Programmer)
- Dual Gig-E and ASI transport inputs and outputs
- HEVC and MPEG-4 video input up to 4K resolution
- MPEG-2 and MPEG-4 HD and SD video outputs
- Fully configurable Statistical Multiplex output for both HD and SD services
- Front panel confidence monitor
- Advanced Modulation support with DVB-S2 8PSK, DVB-S2x 8PSK and 16APSK and 8PSK Turbocodes
- 4 RF inputs (L-Band)
- Configurable DCII subtitle overlay on transcoded video output
- Decryption and pass-through of input video services
- DigiCipher® II conditional access control
- Gig-E port web browser monitoring and control
- SNMP monitoring
- One RU design for rack space savings
- Low power consumption provides operational cost savings

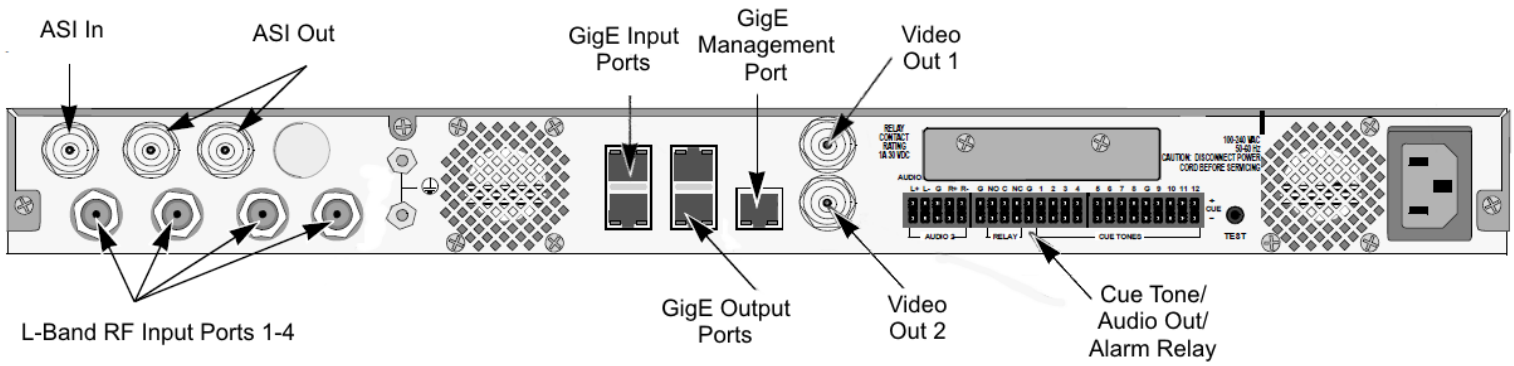
SPECIFICATIONS

L-Band Input	
Input Frequency	950 - 2150 MHz
Input Impedance	75 Ω
Input Connectors	Four (4) F-type
LNB Power Out	16V DC min/450 mA
Port-to-Port Isolation	40 db (minimum)
Digital Processing	
Modulation Modes	DVB-S2, DVB-S2x and 8PSK Turbocodes
Symbol Rates	
DVB-S2/8PSK	3 to 35 Msps
DVB-S2x/16APSK	3 to 35 Msps
8PSK Turbocodes	1 to 30 Msps
FEC Rates	
DVB-S2/8PSK	3/5, 2/3, 3/4, 5/6, 8/9, 9/10
DVB-S2x/16APSK	26/45, 3/5, 28/45, 23/36, 25/36, 13/18, 7/9, 77/90
8PSK Turbocodes	2/3 (1.92), 3/4 (2.05), 3/4 (2.11), 3/4 (2.19), 5/6 (2.30), 8/9 (2.40)
Transcoder Inputs	
Compression Formats	HEVC and MPEG-4
HD Resolution	1080i60, 720p60 and 1080p23.98
SD Resolution	528x480i , 544x480i, 704x480i and 720x480i
Transcoder Outputs	
Compression Formats	MPEG-4 and MPEG-2
HD Resolution	1080i60, 720p60
SD Resolution	528x480i , 544x480i, 704x480i and 720x480i
Aspect Ratio Conversion (HD down-conversion)	4x3 center-cut, 4x3 letterbox, 14:9 and 16:9 (Anamorphic)

SPECIFICATIONS (CONTINUED)

Composite Video Output (Monitoring only except 1 service on DSR-7403)	
Frequency Response (NTSC)	±0.9 dB, 1kHz–4.2 MHz
Output Impedance	75 Ω
Output Level	1.0 V p-p ± 10%
Connectors	Two BNC
Audio Passthrough (2 streams per service)	
Compression Formats	Dolby AC-3 and MPEG-1 Audio Layer II
Audio Output (Monitoring only except 1 service on DSR-7403)	
Compression Formats	Dolby AC-3 and MPEG-1 Audio Layer II
Output	Two stereo pair or four mono
Frequency Response	1.0 dB p-p maximum, 20 Hz to 20 kHz
Audio Impedance	600 Ω load
Peak Audio Level	±20.0 dBu ± 1.0 dB
Connectors	Quick disconnect spring cage plug connector
Ethernet Management Port	
Connector (quantity 1)	RJ-45
Format	10/100/1000BaseT
GigE Input/Output Interface	
Connector (quantity 4)	RJ-45 (two out, two in) GigE input not currently supported
Format	10/100/1000BaseT
ASI Input/Output Interface	
Format	Asynchronous Serial Interface
Transmission	Byte or packet mode
Standard	CENELEC EN 50083-9
Connectors	BNC (two out, one in)
Contact Closures/Cue Tones	
Number of Contact Closures	One (alarm)
Contact Closure Type	Form C
Number of Cue Tone Outputs	12
Physical	
Width	19.0 in (48.3cm)
Depth	24.9 in (63 cm)
Height	1.75 in (4.4cm)
Weight	
DSR-7403	17.6 lb (8 kg)
DSR-7412	20.9 lbs. (9.5 kg)
Power Input	100-240 VAC, 50-60Hz, 100W max
Operating Temperature	0 °C to 40 °C
Humidity	95% relative maximum
Display	2.2” color LCD
Other	
Limited Warranty	One year
Compliance	UL listed/approved, FCC part 15

DSR-7400 HD SERIES REAR PANEL



MODEL AND ORDERING INFORMATION

Model Name	Part Number	Description
DSR-7403	596913-001-00	3 channel commercial IRD/Transcoder shipped with 1 transcoding license and capacity to license up to 2 additional HD/SD output transcoding channels.
DSR-7406	614826-001-00	6 channel commercial IRD/Transcoder shipped with 4 transcoding licenses and capacity to license up to 2 additional HD/SD output transcoding channels.
DSR-7412	596916-001-00	12 channel commercial IRD/Transcoder shipped with 10 transcoding licenses and capacity to license up to 2 additional HD/SD output transcoding channels
DSR-7400 Receiver Channel License	599039-001-00	Channel upgrade license. Includes 1 channel of HD to HD and SD transcoding

CUSTOMER CARE

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656