DSR-7401

Commercial Integrated Satellite Receiver
High Density SD Transcoder

PRODUCT OVERVIEW

The DSR-7401 Transcoder IRD from ARRIS provides a high-quality cost effective solution for service continuity as Programmers sunset their satellite SD service distribution. Utilizing the latest modulation and video compression technologies, the DSR-7401 down-converts and transcodes up to 12 input HD video sources simultaneously across four satellite transponders, from a single Programmer, while also passing the decrypted input services. Customizable multiplex creation with Statmux output provides highly flexible transport stream grooming options and ensures delivery of the highest quality video.

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 high density transcoding enables the DSR-7401 to replace up to 12 single channel satellite receivers. The efficient use of rack space and low power consumption make this transcoder IRD an ideal solution for today's modern digital headends.

KEY FEATURES

- DSR-7401 provides up to 12 transcoded SD output services from HD inputs
- 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 HD inputs
- MPEG-2 and MPEG-4 SD outputs
- Statistical multiplexed output services for enhanced video quality
- 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
Transcoder Outputs	
Compression Formats	MPEG-4 and MPEG-2
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)	
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)	
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	10/100BaseT
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	17.6 lb (8 kg)
Power Input	100-240 VAC, 50-60Hz, 100W max
Operating Temperature	0 °C to 50 °C
Humidity	95% relative maximum
Display	2.2" color LCD
Other	
Limited Warranty	One year
Compliance	UL listed/approved, FCC part 15

DSR-7401 REAR PANEL
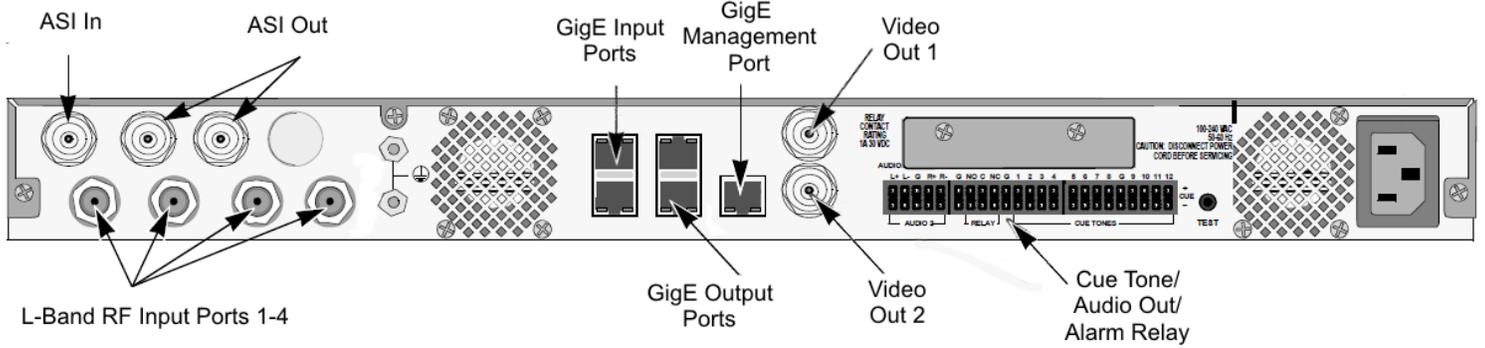
MODEL AND ORDERING INFORMATION

Model Name	Part Number	Description
DSR-7401	596912-001-00	12 channel HD to SD Transcoder

CUSTOMER CARE

Contact Customer Care for product information and sales:

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