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.
DSR-7401 Commercial Integrated Satellite Receiver
High Density SD Transcoder

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

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Frequency</td>
<td>950 - 2150 MHz</td>
</tr>
<tr>
<td>Input Impedance</td>
<td>75 Ω</td>
</tr>
<tr>
<td>Input Connectors</td>
<td>Four (4) F-type</td>
</tr>
<tr>
<td>LNB Power Out</td>
<td>16V DC min/450 mA</td>
</tr>
<tr>
<td>Port-to-Port Isolation</td>
<td>40 db (minimum)</td>
</tr>
</tbody>
</table>

Digital Processing

<table>
<thead>
<tr>
<th>Modulation Modes</th>
<th>DVB-S2, DVB-S2x and 8PSK Turbocodes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbol Rates</td>
<td></td>
</tr>
<tr>
<td>DVB-S2/8PSK</td>
<td>3 to 35 Msps</td>
</tr>
<tr>
<td>DVB-S2x/16APSK</td>
<td>3 to 35 Msps</td>
</tr>
<tr>
<td>8PSK Turbocodes</td>
<td>1 to 30 Msps</td>
</tr>
<tr>
<td>FEC Rates</td>
<td></td>
</tr>
<tr>
<td>DVB-S2/8PSK</td>
<td>3/5, 2/3, 3/4, 5/6, 8/9, 9/10</td>
</tr>
<tr>
<td>DVB-S2x/16APSK</td>
<td>26/45, 3/5, 28/45, 23/36, 25/36, 13/18, 7/9, 77/90</td>
</tr>
<tr>
<td>8PSK Turbocodes</td>
<td>2/3 (1.92), 3/4 (2.05), 3/4 (2.11), 3/4 (2.19), 5/6 (2.30), 8/9 (2.40)</td>
</tr>
</tbody>
</table>

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) |
### 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

L-Band RF Input Ports 1-4

MODEL AND ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Model Name</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSR-7401</td>
<td>596912-001-00</td>
<td>12 channel HD to SD Transcoder</td>
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</tbody>
</table>

CUSTOMER CARE

Contact Customer Care for product information and sales:
- United States: 866-36-ARRIS
- International: +1-678-473-5656

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