



# DSR-6000

## Commercial Integrated Receiver/Decoder



### An Advance Feature Digital Satellite Receiver for Cable Programmers and Operators

#### Highlights Include:

- Stackable 1RU chassis design
- 8 RF Inputs (L-Band)
- Dual tuner design
- MPEG-2 ML@MP, H.264/AVC L3/L4@MP
- Advanced Modulation support with DVB-S QPSK, and DVB-S2 QPSK/8PSK
- Concurrent decryption of up to four services
- Variable tuning from 4 MHz to 36 MHz
- Dolby® Digital and MPEG layer II audio processing
- VBI reinsertion SID/AMOL-II, NABTS and closed caption
- DigiCipher II conditional access control
- Quick disconnect terminals for easy installation
- DTMF cue tones for local ad insertion
- ASI input
- Dual ASI, Gig-E, composite video and dedicated video diagnostics outputs
- 10/100 BaseT Ethernet port SNMP monitoring and control
- Uplink controlled Fingerprint overlay

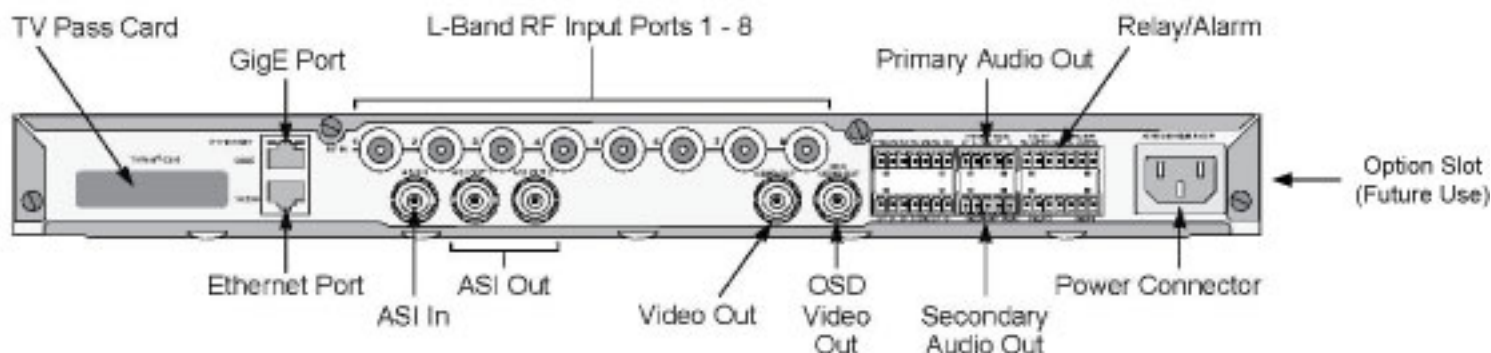
- Async, ISOC and DSM-CC encapsulated IP data support
- Optional HD-SDI output with 2 channels of embedded audio
- 32-GB flash memory to accommodate storage of text, graphics, and video files

For more information regarding any of these features contact your Motorola sales representative.

The DSR-6000 Integrated Receiver/Decoder from Motorola brings revolutionary technology advances from a recognized leader in satellite program delivery. Building on the existing 6000 IRD family, the DSR-6000 is capable of decoding both MPEG-2 and H.264 AVC services. In addition, the DSR-6000 is capable of decrypting up to 4 services concurrently. Its sleek packaging design fits in a standard 19" relay rack and requires only a single rack unit of space.

The Motorola DSR-6000 comes equipped with industry standard output interfaces such as Gig-E and dual ASI outputs that enable seamless connections to head-end equipment. With advanced modulation support, the DSR-6000 supports both DVB-S QPSK and DVB-S2 QPSK/8PSK.

| TECHNICAL SPECIFICATIONS   |  | Contact Closures                  |   |
|--|--|-----------------------------------|---|
| <b>L-Band Input</b>  |  | Number of Closures:               | 4 (1 alarm)                                   |
| Input Frequency: 950 - 2150 MHz  |  | Type:                             | Form C  |
| Input Impedance: 75 $\Omega$   |  | <b>Data</b>                       |   |
| Input Connectors: Eight (8) F-type   |  | Asynchronous:                     | 1200, 2400, 4800, 9600, 19200 bps             |
| LNB Power Out  |  | Isochronous:                      | 19.2 kbps - 2.048 Mbps, 3.0, 4.5 and 9.0 Mbps |
| F-Connector: 16V DC min/450 mA   |  | DSM-CC UDP-IP:                    | 54 Mbps                                       |
| Port-to-Port Isolation: 40 db (minimum)  |  | <b>Ethernet</b>                   |   |
| <b>Digital Processing</b>  |  | Connectors:                       | Two (2) RJ-45                                 |
| Modulation Modes: DVB-S QPSK, DVB-S2 QPSK/8PSK   |  | Formats:                          | 10/100BaseT and Gig-E                         |
| Symbol Rates: 1 to 31.25 Msps  |  | <b>ASI Output (2) / Input (1)</b> |   |
| QSPK FEC Rates: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 7/8  |  | Format:                           | Asynchronous serial interface                 |
| DVB-S2 FEC Rates: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10  |  | Transmission:                     | Data byte and packet                          |
| <b>Composite Video</b>   |  | Standard:                         | CENELEC EN 50083-9                            |
| Frequency Response (NTSC): $\pm 0.9$ dB, 1kHz - 4.2 MHz  |  | Connector:                        | BNC   |
| Frequency Response (PAL): $\pm 0.9$ dB, 1kHz - 4.8 MHz   |  | <b>Cue Tones</b>                  |   |
| Signal/Noise Ratio: 57 dB (min)  |  | Signal Type:                      | Differential output                           |
| Differential Gain: 4.0% p-p (max) (10% to 90% APL)   |  | Signal Level:                     | 0 dBm, $\pm 3$ dB (600 $\Omega$ )/tone        |
| Difference Phase: 1.5 deg. (max)   |  | Connector:                        | Quick disconnect terminal                     |
| Output Impedance: 75 $\Omega$  |  | <b>Physical</b>                   |   |
| Output Level: 1.0 V p-p $\pm 10\%$   |  | Width:                            | 18.9" (48cm)                                  |
| <b>Audio</b>   |  | Depth:                            | 18.11" (46cm)                                 |
| Output: 2 stereo pair or 4 mono  |  | Height:                           | 1.65" (4.2cm)                                 |
| Output Level: $\pm 18.0$ dBu, $\pm 1.0$ dB into 600 $\Omega$ balanced load, adjustable (0 to -18 dB) |  | Weight:                           | 11 lb (5kg) approx                            |
| Frequency Response: $\pm 1.0$ dB, 20 Hz to 20 kHz  |  | Power Input:                      | 100-240 VAC, 50-60Hz, 60 W max                |
| Total Harmonic Distortion: 0.4% or better at 1kHz  |  | Operating Temperature:            | 0 to 40C                                      |
| Signal/Noise Ratio: 85 dB or better at 1 kHz RE: + 18 dBu, measured at 20 Hz to 20 kHz               |  | Humidity:                         | 95%, relative maximum                         |
| Isolation, L/R: 80 dB at 1 kHz   |  | Display:                          | 2 line, 40 character LCD                      |
| Impedance: 50 $\Omega$   |  | <b>Other</b>                      |   |
|  |  | Limited Warranty:                 | Three years                                   |
|  |  | Compliance:                       | UL/TUV/CE listed/approved                     |



**MOTOROLA**

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