

# Features and Options

<b>Transport Stream Interface Options</b>	<p>MPEGoIP Input</p> <ul style="list-style-type: none"><li>• TS bit rate: Up to 60 Mbps</li><li>• SPTS / MPTS</li><li>• UDP, RTP (optional)</li><li>• Multicast/unicast</li><li>• IGMPv2, (IGMPv3 ready)</li><li>• Network De-Jittering</li><li>• Pro-MPEG De-Jittering</li><li>• Link redundancy (optional)</li><li>• Logical (source) redundancy (optional)</li><li>• Pro-MPEG FEC (optional)</li><li>• Interface: Dual 10/100 Base-T, RJ-45</li></ul> <p>MPEGoIP output</p> <ul style="list-style-type: none"><li>• SPTS / MPTS</li><li>• TS bit rate: Up to 60 Mbps</li><li>• UDP, RTP (optional)</li><li>• Multicast/unicast</li><li>• PID Dropping with PCR Re-stamping (optional)</li><li>• Pro-MPEG FEC (optional)</li><li>• Interface: 10/100 Base-T, RJ-45</li></ul> <p>ITU-T G.703 Ready</p> <p>DVB-S2 ETSI EN 302 307</p> <ul style="list-style-type: none"><li>• Applications: Broadcast Services and DSNG</li><li>• Mode: Constant Coding and Modulation (CCM)</li></ul>	<ul style="list-style-type: none"><li>• Constellations: QPSK, 8PSK</li><li>• FEC frames: Normal (64800 bits), Short (16200 bits)</li><li>• Roll-Off: 0.35, 0.25, 0.20</li><li>• Frequency range: 950 MHz - 2150 MHz</li><li>• Symbol Rate Range: 64Ksym/s - 45Msym/s</li><li>• TS bit rate Range: 128Kbps - 107Mbps</li><li>• Two L-Band RF 75 ohm inputs with LNB control</li></ul> <p>DVB-S</p> <ul style="list-style-type: none"><li>• Constellation: QPSK</li><li>• Frequency Range: 950-2150 MHz (L-Band)</li><li>• Symbol Rate Range: 1-45M Sym/s</li><li>• L-Band RF input with LNB control and Loop-through output</li></ul> <p>DVB-DSNG</p> <ul style="list-style-type: none"><li>• Constellations: QPSK, 8PSK and 16QAM</li><li>• Frequency Range: 950-2150 MHz</li><li>• Symbol Rate Range: 1-45 Msym/s</li><li>• Two L-Band RF 75 ohm inputs with LNB control</li></ul> <p>DVB-ASI Input</p> <ul style="list-style-type: none"><li>• Interface: Copper BNC connector</li><li>• TS bit rate: Up to 150 Mbps</li></ul> <p>DVB-ASI Output</p> <ul style="list-style-type: none"><li>• Dual interface : Copper BNC connector</li><li>• ASI Options: Input stream with selected program decrypted, Input stream and Loop-through</li></ul> <p>VBI Re-insertion</p> <ul style="list-style-type: none"><li>• In composite video and embedded in SDI</li><li>• WST Teletext and inverted Teletext</li><li>• WSS, VPS, VITC, CC, AMOL I, AMOL II (optional), V-CHIP</li><li>• Enhanced VITS with built-in generator</li></ul> <p>Audio</p> <ul style="list-style-type: none"><li>• Up to 4 Analog Audio Stereo pairs Balanced interfaces</li><li>• Up to 4 Digital Audio AES/EBU-SPDIF interfaces</li><li>• Up to 4 stereo channels embedded in SDI</li><li>• Modes: stereo, joint stereo, dual channel, single channel</li><li>• Max output level: +18 dBu analog, 0 dBFS digital</li><li>• Gain control: -64 dB to 0 dB / mute</li><li>• Dolby Digital (AC-3) Pass-through</li><li>• Dolby Digital (AC-3) LT/RT Downmixing (optional)</li><li>• Linear PCM (SMPTE 302M 2000), Dolby-E Pass-through (optional)</li></ul> <p>Data</p> <ul style="list-style-type: none"><li>• Low speed data: RS-232 up to 115.2 Kbps</li><li>• High speed data: RS-422 Up to 20 Mbps (optional)</li><li>• IP data out : Up to 60Mbps, MPE decapsulation (optional)</li></ul> <p>DVB-CI</p> <ul style="list-style-type: none"><li>• Interface: Two CI slots EN-50221</li><li>• CA method: Multicrypt, Simulcrypt</li><li>• CAS: Viaccess®, Irdeto®, Conax®, MediaGuard®, Nagravision®, Cryptoworks®, VideoGuard®, OnDigital®, CODICrypt®</li></ul> <p>Remote</p> <ul style="list-style-type: none"><li>• SNMP Management</li><li>• Web based management</li><li>• Interface: 10/100 Base T, RJ-45</li><li>• Software download</li><li>• Terminal via RS-232 or RS-485</li></ul> <p>Over the Air</p> <ul style="list-style-type: none"><li>• Control</li><li>• Software download</li></ul> <p>Safety</p> <ul style="list-style-type: none"><li>• EN60950</li><li>• CB (IEC60950)</li><li>• cTUVus</li><li>• UL60950</li></ul> <p>Storage and Transportation</p> <ul style="list-style-type: none"><li>• Temperature: -40°C - 70°C</li><li>• Humidity: 0% - 95% (non-condensing)</li></ul> <p>Voltage:</p> <ul style="list-style-type: none"><li>- 100V-240V AC, 50/60Hz</li><li>- 48V DC (Optional)</li></ul> <p>Power Consumption: Up to 50 W max</p>
<b>Decoder Outputs</b>	<p>Video</p> <ul style="list-style-type: none"><li>• Number of decoders in 1RU: Up to 2 decoders</li><li>• Analog video interfaces:<ul style="list-style-type: none"><li>- Up to three composite</li><li>- Single S-video</li></ul></li><li>• Digital Video Interfaces:<ul style="list-style-type: none"><li>- SDI with embedded VBI and up to 4 stereo channels</li><li>- Additional SDI with embedded VBI and up to 2 stereo channels</li></ul></li><li>• Video Formats:<ul style="list-style-type: none"><li>- PAL-B/G/I/M/N/D, NTSC, SECAM L/B/G/K1</li><li>- Russian SECAM D/K (composite video only)</li></ul></li><li>• Decoding:<ul style="list-style-type: none"><li>- 4:2:0 MP@ML (1.5-15 Mbps)</li><li>- 4:2:2 PP@ML (1.5-50 Mbps)</li></ul></li><li>• Video resolution interpolation: Pan-Scan, Letter box or Pass-through</li><li>• Aspect ratio: 4:3/16:9 and 14:9</li><li>• Graphic processing: OSD, DVB Subtitling, EBU (Teletext) Subtitling (optional)</li><li>• GenLock input and loop-through output</li></ul> <p>Front Panel Monitoring</p> <ul style="list-style-type: none"><li>• Video monitor output connector</li><li>• Audio monitor output connector</li></ul>	
<b>Conditional Access</b>	<p>Embedded DVB-Descrambling</p> <p>Embedded DVB-Descrambling</p> <ul style="list-style-type: none"><li>• BISS Mode-1</li><li>• BISS-E</li><li>• CAS-5000</li></ul>	
<b>Control and Monitoring</b>	<p>Local</p> <ul style="list-style-type: none"><li>• Graphical easy-to-use panel</li><li>• Up to 100 stored setups</li><li>• Advanced satellite scanning</li><li>• GPI dry contacts for various status and faults</li></ul> <p>Enhanced DVB Monitoring</p> <ul style="list-style-type: none"><li>• Front panel display: signal quality, Eb/N0, BER, ASI format, network and service information, CA information, CI slots, video and audio decoded information</li></ul>	
<b>Compliance</b>	<p>EMC</p> <ul style="list-style-type: none"><li>• EN55013 (CISPR 13)</li><li>• EN55020 (CISPR 20)</li><li>• EN55022 (CISPR 22)</li><li>• EN55024 (CISPR 24)</li><li>• FCC part 15 (class A)</li><li>• CB</li></ul>	
<b>Environmental</b>	<p>Operation</p> <ul style="list-style-type: none"><li>• Temperature: 0°C - 50°C</li><li>• Humidity: 5% - 90% (non-condensing)</li></ul>	
<b>Conditions Physical/Power</b>	<ul style="list-style-type: none"><li>• 1RU unit, 19" rack mountable</li><li>• Dimensions (HxWxD): 1RU x 19" x 14" 44mm x 482.6mm x 357mm</li><li>• Weight: 3.5Kg / 7.7lbs</li></ul>	

