



The PowerVu® Multiple Decryption Receiver receives, demodulates, and decrypts multiple PowerVu encrypted MPEG-2/DVB digital programs delivered via a satellite or terrestrial interface. Decoded composite video and balanced audio outputs are provided for monitoring purposes.

Digital Cable Program Distribution

ASI and DHEI transport outputs are provided for digital tier program delivery to cable headends or direct-to-home networks. This ensures that the highest quality video programs are efficiently distributed to households equipped with digital set-top boxes.

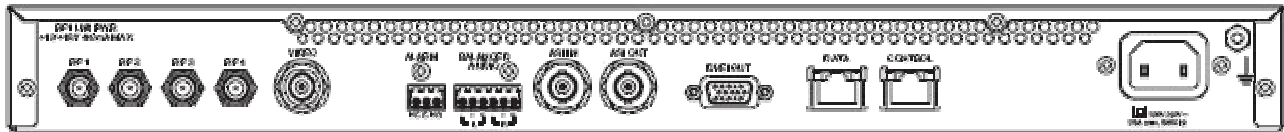
Alarm Monitoring

A contact relay is provided for simple alarm monitoring.

Features:

- Variable QPSK symbol rates from 1 to 45 Msymbols/s
- PowerVu conditional access with DES de-scrambling
- DVB-ASI transport input
- Decrypts up to 16 video programs with other services (e.g., audio or data)
- DVB-ASI and DHEI transport outputs
- 4:2:0 NTSC & PAL(B/G/I/D/M/N) video decoding for monitoring purposes
- MPEG & Dolby Digital® (AC-3) audio decoding for monitoring purposes
- Two balanced audio outputs providing either one stereo pair or two mono channels
- Line 21 on the monitor video output
- On-screen display for easy setup
- Front Panel LCD and pushbuttons for status monitoring
- 64 user-editable RF preset configurations

D9828 Rear Panel Configuration:



Specifications:

Features	Description	
System	MPEG-2/DVB Compatible EN 300 421, EN 300 468	De-modulation: QPSK FEC: Variable (1/2, 2/3, 3/4, 5/6, or 7/8)
Tuner	Input Level: -25 dBm to -65 dBm per carrier Frequency Range: 950 MHz to 2150 MHz Tuning Step Size: 125 kHz Symbol Rate Range: 1.0 to 45 Msymbols/s	Carrier Capture Range: $\geq \pm 3.0$ MHz (5-45 Msym) Satellites: C-band and Ku-band Input Impedance: 75 Ω
DVB-ASI Input	EN50083-9, DVB-ASI coaxial Supported Packet Length: 188 or 204 bytes Transport Bit Rate: Up to 68.5 Mb/s	
Analog Outputs for monitoring purposes	Analog Video Output Number of Channels: One Video Decompression Type: MPEG-2 4:2:0 Output Level: 1.0 Vpp $\pm 10\%$ Output Impedance: 75 Ω Video Standard: NTSC & PAL B/G/I/D/M/N Frequency Response: NTSC: 0.1-4.2 MHz $\leq \pm 1.0$ dB PAL: 0.1-5.0 MHz $\leq \pm 1.5$ dB Maximum Video Resolution: 720 x 576/480 Maximum Video Bit rate: 15 Mb/s Chroma-luma Delay: ± 30 ns Field Time Distortion: $\leq 3\%$ Line Time Distortion: $\leq 3\%$ Luminance Non-linearity: $\leq 5\%$ Differential Gain: $\leq 4\%$ Differential Phase: $\leq 4^\circ$ Signal-to-Noise Ratio: ≥ 55 dB	Analog Audio Output Number of Channels: One stereo pair/ two mono channels Audio decompression: MPEG or Dolby Digital (AC-3) Output Level: Balanced, adjustable audio outputs are factory set for unity gain (0 dBm out over 600 Ω for 0 dBm in). Output is adjustable (via the on-screen display) by ± 6.0 dB (ref., 100 K Ω). Factory calibrated to +18 dBu (at full scale). Frequency Response: ± 0.5 dB, 20 Hz to 20 kHz (ref., 100 K Ω) Total Harmonic Distortion: $< 0.3\%$ at 1 kHz (ref. 100 K Ω) Dynamic Range: 85 dB (CCIR/Arm weighting) Crosstalk: 80 dB at 1 kHz (typical)
Data Outputs	Ethernet Output for IP data RJ-45, 10/100BaseT, up to 50 Mbps (in future release)	
Transport Outputs	EN 50083-9, DVB-ASI coaxial Supported Packet Length: 188 bytes	Interface: DHEI simplex output (15-pin) Output Bit Rate: 27 Mbps
Other Outputs	Ethernet Output for Control & Monitoring RJ-45, 10/100BaseT (in future release)	Programmable Relay Output
Environmental/ Physical	Operating Temperature: 0°C to 50°C (32°F to 122°F) Storage Temperature: -20°C to 70°C (-4°F to 158°F)	Physical Dimensions: 1.75 in. H x 19.0 in. W x 20.5 in. D (4.4 cm H x 48.3 cm W x 52.1 cm D) 1RU high, 19 in. EIA rack mountable Weight: 15 lbs (6.9 kg) approx.
Power	Voltage Range: 100 V to 240 V AC Line Frequency: 50/60 Hz	Power Consumption: 64 W max. LNB Power on RF#1: +13 V/+18 V @ 400 mA max.