Model D9828 Multiple Decryption Receiver



Description

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.

Key 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

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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: ≥ ±3.0 MHz (5-45 Msym) Satellites: C-band and Ku-band Input Impedance: 75Ω
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: \pm 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° Signal-to-Noise Ratio: \geq 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.

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D9828 Rear Panel Configuration



Ordering Information

Description	Part Number
4 RF Inputs, ASI and DHEI Out, ASI In, NA Power cord	4010231
4 RF Inputs, ASI and DHEI Out, ASI In (MDR pool ISE), NA Power cord	4008747
4 RF Inputs, ASI and DHEI Out, ASI In, indicate country- specific power cord (select from table below)	4010233

Country-specific Power Cords

Description	Part Number
UK power cord	3993137
Euro power cord	3993136
Australia power cord	1001832
Argentina power cord	1001790
Brazil power cord	1001800
China power cord	745415

Options

Description	Part Number
DHEI cable, simplex, 2-meter, 15-pin to 26-pin (for connection to Motorola IRT, Expansion Out port)	4010239
DHEI cable, simplex, 2-meter, 15-pin to 15-pin	4009434



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