

# Secure Content Distribution with Compact Receiver

Synamedia's PowerVu Compact Receiver is designed for satellite content distribution, targeting broadcast, business TV, private network, and SMATV environments. Capable of receiving digitally encrypted video, audio, VBI, and data, the receiver provides a cost-effective, variable-rate solution for transitioning existing DVB<sup>®</sup>-S/MPEG-2 services to DVB-S2/MPEG-4&HEVC. In emerging markets, the receiver complements Synamedia's PowerVu Professional receiver (D9800).

## Key Functionalities

### Ease of installation and use

Easy to set up with a web interface via an Ethernet port, the receiver features navigation keys on its front panel for basic actions.

### Free-to-air reception

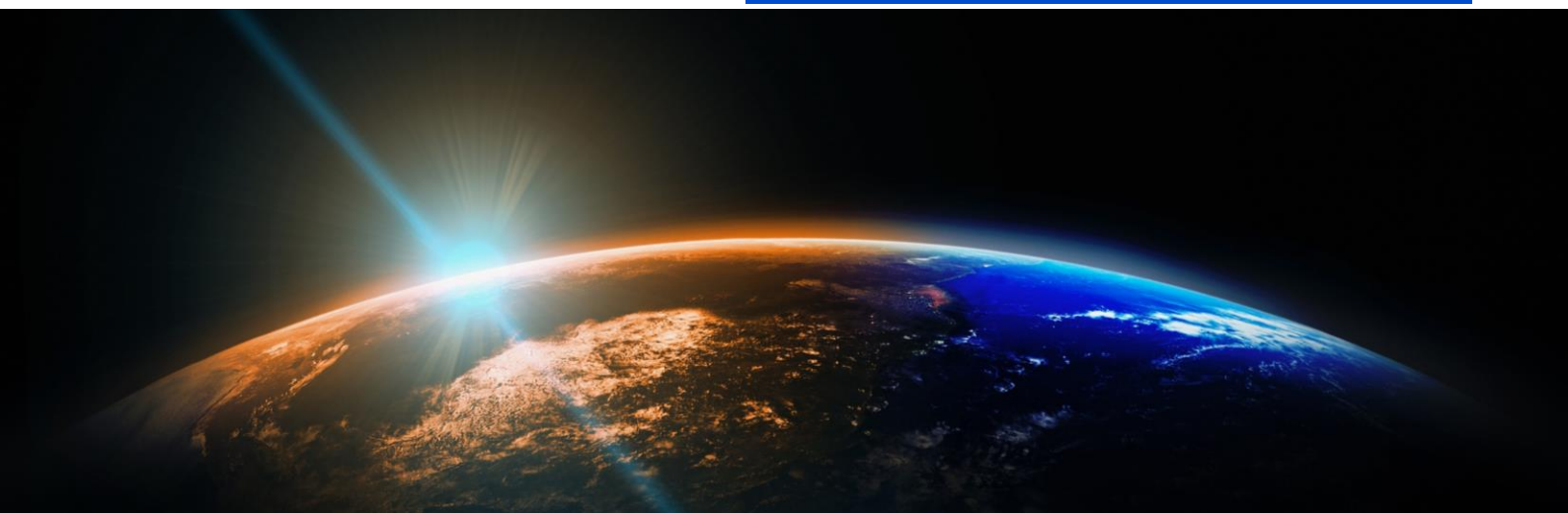
The receiver can receive DVB/MPEG compliant free-to-air broadcast.

### Secure broadcast reception

Supporting PowerVu conditional access with DES or DVB descrambling using AES128 encryption, the receiver can receive secure corporate video, audio, and data broadcast communications. It can also be used for the secure delivery of TV programming to hotels, MDUs, homes, and commercial establishments such as restaurants and stores. The compact receiver supports VideoGuard CA support through CAM.

## Technical Advantages

- DVB-S QPSK, DVB-S2 QPSK/8PSK, and 16 APSK (licensed) demodulation
- Symbol rate from 1.0 to 45 MS/s for DVB-S and from 1.0 to 45 MS/s for DVB-S2
- PowerVu conditional access with DES and DVB descrambling with AES128 support
- VideoGuard conditional access support
- CAM interface hardware for DVB VideoGuard CAM-based descrambling
- 4:2:0 high definition (HD) MPEG-2, MPEG-4 AVC, and HEVC decoding (licensed)
- 4:2:0 standard definition (SD) MPEG-2, MPEG-4 AVC, and HEVC decoding (licensed)
- 4:2:0 NTSC and PAL (B/G/I/D/M/N) video decoding
- MPEG, Dolby<sup>®</sup> Digital, and HE-AAC audio decoding
- DVB subtitling and DVB VBI (WST, WSS, VPS)
- One unbalanced stereo pair of audio outputs
- Line 21 closed caption and V-chip support
- Fingerprint trigger
- Service replacement
- Field upgradeable software
- Front panel 4-digit LCD for channel display and info
- MPE data support (future) and web GUI
- Dolby Digital Plus
- HDMI outputs for HDTV
- Ethernet 10/100BaseT for web interface and IP data





## Product Specifications

### Device

System	<ul style="list-style-type: none"> <li>• MPEG-2/DVB compatible EN300</li> <li>• 421, EN 300468, H.264, HEVC</li> </ul>
Demodulation	<ul style="list-style-type: none"> <li>• DVB-S QPSK, DVB-S2 QPSK, 8PSK, 16 APSK (optional license)</li> </ul>

### Tuner

Number of RF Inputs	<ul style="list-style-type: none"> <li>• 1</li> </ul>
Input Level	<ul style="list-style-type: none"> <li>• -25 dBm to -65 dBm per carrier</li> </ul>
Frequency Range	<ul style="list-style-type: none"> <li>• 950 MHz to 2150 MHz</li> </ul>
Symbol Rate Range	<ul style="list-style-type: none"> <li>• DVB-S: 1.0 to 45 MSymbols/s</li> <li>• DVB-S2: 1.0 to 45 MSymbols/s</li> </ul>
Satellites	<ul style="list-style-type: none"> <li>• C-band and Ku-band</li> </ul>
Receiver Spectrum Sense	<ul style="list-style-type: none"> <li>• Normal and inverted</li> </ul>
Input Impedance	<ul style="list-style-type: none"> <li>• 75Ω</li> </ul>

### Analog Video Output

Number of Channels	<ul style="list-style-type: none"> <li>• 1</li> </ul>
Connector Type	<ul style="list-style-type: none"> <li>• RCA</li> </ul>
Video Decompression Type	<ul style="list-style-type: none"> <li>• MPEG-2 4:2:0, MPEG-4 4:2:0, HEVC 4:2:0</li> </ul>
Level	<ul style="list-style-type: none"> <li>• 1.0 V pp±5%</li> </ul>
Video Standard	<ul style="list-style-type: none"> <li>• NTSC and PAL B/G/I/D/M/N, supports HD down-conversion</li> </ul>

### Digital Audio/ Video Output

Number of Outputs	<ul style="list-style-type: none"> <li>• 1 HDMI digital audio/video output, supports SD-to-HD up-conversion</li> </ul>
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### Analog Audio Output

Number of Channels	<ul style="list-style-type: none"> <li>• 1 stereo pair or 2 mono channels</li> </ul>
Connector Type	<ul style="list-style-type: none"> <li>• RCA</li> </ul>
Output Level	<ul style="list-style-type: none"> <li>• Unbalanced, 2 V rms ±10% at 0 dBFS</li> </ul>
Audio Decompression	<ul style="list-style-type: none"> <li>• MPEG 1 Layer 2, Dolby Digital Plus, HE-AAC</li> </ul>

VBI	
NTSC	<ul style="list-style-type: none"> <li>• Lines 10 to 22 fields 1 and 2</li> </ul>
PAL	<ul style="list-style-type: none"> <li>• Lines 7 to 22 fields 1 and 2</li> <li>• WST, WSS, VPS</li> </ul>

## Data Outputs

Ethernet port (webUI)	
Connector	<ul style="list-style-type: none"> <li>• RJ-45, 10/100BaseT</li> </ul>

Environmental Specifications	
Operating Temperature	<ul style="list-style-type: none"> <li>• 0–50°C (32–122°F)</li> </ul>
Storage	<ul style="list-style-type: none"> <li>• –20–70°C (–4–158°F)</li> </ul>

Chassis Mechanical Specifications	
Height	<ul style="list-style-type: none"> <li>• 1.8" supports 3 single units in a 1.5RU spacing, 19" EIA rack mountable</li> </ul>
Width	<ul style="list-style-type: none"> <li>• 5.7"</li> </ul>
Depth	<ul style="list-style-type: none"> <li>• 4.9"</li> </ul>
Weight	<ul style="list-style-type: none"> <li>• 1.75lbs (with PS)</li> </ul>
PS Voltage Range	<ul style="list-style-type: none"> <li>• Power supply input 100 V to 240 VAC, 1A, 50/60Hz, output 12Vdc, 2.5A</li> </ul>
Unit Input	<ul style="list-style-type: none"> <li>• 12Vdc, 1.5A</li> </ul>
Power Consumption	<ul style="list-style-type: none"> <li>• 35 W max.</li> </ul>
LNB Power on Satellite Input	<ul style="list-style-type: none"> <li>• +13 V/+18 V @ 350 mA max.</li> </ul>



## Ordering Information

Description	Part Number
D9866 PAL/NTSC HEVC IRD with CAM	D9866-CSR-CAM
D9866 license upgrade	D9866-LIC-UPGR
HD enablement on HDMI	L-D9866-VR-HD
D9866 16 APSK demodulation license	L-D9866-SAT-APSK
D9866 full HD output license (1080p)	L-D9866 VR-3G
HEVC decode enablement	L-D9866-DEC-HEVC

## Services & Support

Synamedia provides a broad portfolio of services and support to increase your network's business value and return on investment. We take a customer-centric approach, aligning our level of support to your technological requirements and network complexity. That way, you can successfully operate our products and solutions to ensure that you achieve optimal performance throughout your network's life cycle.

## Warranty & Contact Information

[Read our detailed warranty information.](#)

## About Synamedia Video Network Solutions

Synamedia is a leading global provider of video distribution, streaming, processing, and network delivery solutions for content owners and service providers. Our comprehensive, cloud-based SaaS and managed service solutions and software products enable customers to manage OTT media streaming and broadcast workflows, secure video content and services, and deliver premium user experiences across all screens. Leveraging expert know-how and 30-plus years of experience for over 1,000 customers worldwide, Synamedia helps video businesses launch, monetize and scale services across all devices to capture a greater share of the consumer video wallet.

## Next Steps

Learn more about **Synamedia Video Network solutions**.

For more information, **contact us**.