

## Cisco D9865 Satellite Receiver

### Product Overview

The Cisco® D9865 Satellite Receiver is designed for satellite content distribution, and targets the broadcast, business TV, private networks, and SMATV environment. The receiver offers the ability to receive digitally encrypted video, audio, VBI, and data. It provides a cost-effective, variable-rate solution to transition existing DVB-S/MPEG-2 services to DVB-S2/MPEG-4. Additional features include IP data and RS-232 utility data.

**Figure 1.** Cisco D9865 Satellite Receiver



### Ease of Use

The unit is set up via the on-screen display menu, using a handheld infrared remote control, or navigation keys on the front panel of the receiver. User-editable presets are provided for quick re-tuning to other broadcasts. The receiver also supports a Web interface and SNMP control via the Ethernet port as an option.

### Free-to-air Reception

This receiver is capable of receiving a DVB/MPEG compliant free-to-air broadcast.

### Secured Broadcast Reception

Supporting the PowerVu conditional access with DES or DVB descrambling, or with DVB Conditional Access Module (CAM) based DVB CA systems, this receiver can be used to receive secured corporate communication of video, audio, and data broadcast. It can also be used for secured delivery of TV programming to hotels, MDUs, homes, and commercial establishments such as restaurants and stores.

## Data Outputs

Data outputs can be used for distribution of electronic documents, such as price lists and video files. Utility data (RS-232) can be used for smaller file transfer at a slower speed. DVB MPE IP data via an Ethernet interface allows for connection to a local area network for larger file transfer or communication with multiple network clients.

## Features

- DVB-S QPSK, DVB-S2 QPSK/8PSK demodulation
- Variable QPSK symbol rates from 1 to 45 Msymbols/s for DVB-S and DVB-S2
- PowerVu<sup>®</sup> conditional access with DES and DVB descrambling
- CAM interface hardware for DVB CAM-based descrambling
- 4:2:0 High Definition (HD) MPEG-2 and MPEG-4 AVC decoding
- 4:2:0 Standard Definition (SD) MPEG-2 and MPEG-4 AVC decoding
- 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 and security
- Front panel 4-digit LED for channel display
- On-screen display menu for setup and status
- User-editable preset configurations

## Optional Features

- HDMI and component video outputs for HDTV (D9865H and D9865D only)
- Dual Ethernet 10/100BaseT for IP data, Web interface, SNMP control (D9865D only)

## Anticipated Future Software Features

- MPE data support and Web GUI (D9865D only)
- RS-232 low-speed data (D9865D only)
- CAM Interface software (all models)
- Dolby Digital Plus (all models)

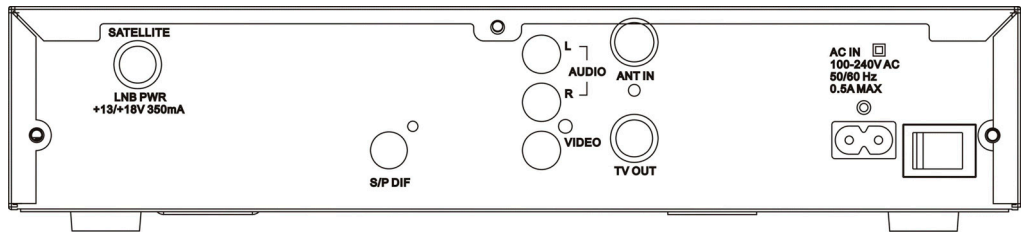
## Specifications

**Table 1.** Product Specifications

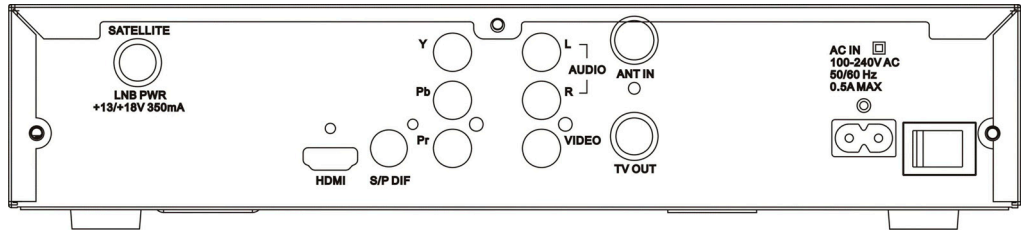
Parameter	Value
<b>System</b>	
MPEG-2/DVB Compatible EN300 421, EN 300468	
Demodulation	DVB-S QPSK, DVB-S2 QPSK and 8PSK
<b>Tuner</b>	
Number of RF Inputs	1
Input Level	-25 dBm to -65 dBm per carrier
Frequency Range	950 MHz to 2150 MHz
Symbol Rate Range	DVB-S: 1.0 to 45 MSymbols/s DVB-S2: 1.0 to 31 MSymbols/s
Satellites	C-band and Ku-band
Input Impedance	75 $\Omega$
<b>Analog Video Output</b>	
Number of Channels	1
Connector Type	RCA
Video Decompression Type	MPEG-2 4:2:0, MPEG-4 4:2:0
Level	1.0 V pp $\pm$ 10%
Video Standard	NTSC and PAL B/G/I/D/M/N, supports HD down-conversion
<b>Digital Audio/Video Output (D9865H and D9865D only)</b>	
Number of Outputs	1 HDMI digital audio/video output, supports SD-to-HD up-conversion
<b>HD Analog Video Output (D9865H and D9865D only)</b>	
Number of Outputs	1 component (Y, Pb, Pr) HD analog video output
<b>Analog Audio Output</b>	
Number of Channels	1 stereo pair or 2 mono channels
Connector Type	RCA
Output Level	Unbalanced, 2 V rms $\pm$ 10% at 0 dBFS
Audio Decompression	MPEG 1 Layer 2, Dolby Digital, HE-AAC
<b>Digital Audio S/PDIF Output</b>	
Connector Type	RCA
<b>VBI</b>	
NTSC	Lines 10 to 22 fields 1 and 2
PAL	Lines 7 to 22 fields 1 and 2 WST, WSS, VPS
<b>Data Outputs (future)</b>	
RS-232 asynchronous data	
Rates	300, 1200, 2400, 4800, 9600, 19,200, 38,400 b/s
Ethernet Output for IP data	
Connector	RJ-45, 10/100BaseT
<b>Environmental Specifications</b>	
Operating Temperature	0 to 50°C (32°F to 122°F)
Storage	-20 to 70°C (-4°F to 158°F)
<b>Chassis Mechanical Specifications</b>	
Height	2.36 in. (6.0 cm)

Parameter	Value
Width	11.69 in. (29.7 cm)
Depth	7.68 in. (19.5 cm)
Weight	5 lbs (2.3 kg)
<b>Power</b>	
Voltage Range	100 V to 240 VAC
Line Frequency	50/60 Hz
Power Consumption	35 W max.
LNB Power on satellite input	+13 V/+18 V @ 350 mA max.

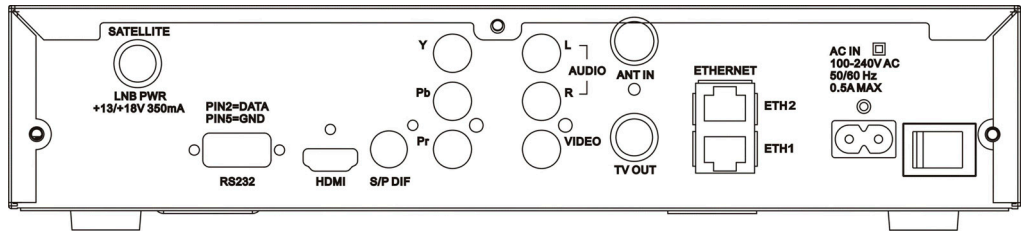
**Figure 2.** Cisco D9865B Satellite Receiver Rear Panel (Base unit – SD Video Decoding)



**Figure 3.** Cisco D9865H Satellite Receiver Rear Panel (Base SD and HD output version)



**Figure 4.** Cisco D9865D Satellite Receiver Rear Panel (Full-featured with HDMI and Data)



## Ordering Information

**Table 2.** Ordering Information

Cisco D9865 Satellite Receiver	Part Number
<b>D9865B (Base version with SD only outputs/HD Down-conversion)</b>	
NTSC CH3/4 Modulator with NA cord	402865100001
PAL UHF CH21-69 modulator with Euro plug	4028651020005
PAL UHF CH21-69 modulator with no power cord (select from below)	4028651020000
<b>D9865H (Base SD and HD output version)</b>	
NTSC CH3/4 Modulator with NA cord	4028651040001
PAL UHF CH21-69 modulator with Euro plug	4028651060005
PAL UHF CH21-69 modulator with no power cord	4028651060000
<b>D9865D (SD and HD output version with data interfaces)</b>	
NTSC CH3/4 Modulator with NA cord	4028651120001
PAL UHF CH21-69 modulator with Euro plug	4028651140005
PAL UHF CH21-69 modulator with no power cord (select from below)	4028651140000
<b>Power Cords</b>	
UK power cord	1002798
Euro power cord	503414
Australia power cord	1002604
Argentina power cord	1002655
Brazil power cord	1003648
China power cord	1003670
India power cord	1003667

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