

CDR1 DVB-T COFDM Video Receiver

Excellent Digital Video Receiver for Urban Multipath Environments!



Design Features

- 45 Cubic Inch Package (4.50"x6.75"x1.50")
- Low Power Draw
- Full Frequency Band Channelization
- Local & Remote Frequency and Configuration Selection
- 6/7/8 MHz DVB-T Bandwidths
- Optional 1.25/2.5 MHz Bandwidths
- MPEG2 and MPEG4 Compression
- QPSK/16QAM/64QAM Modulation
- AES 256 Bit Encryption
- Diversity Antenna Configuration
- Supports Composite Video (NTSC or PAL)

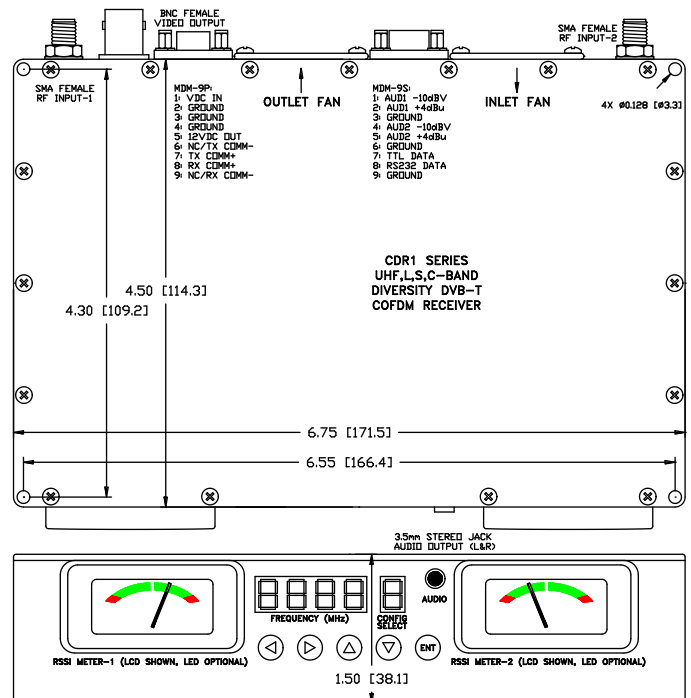
CDR1 Series

AMP's CDR1 Series COFDM DVB-T video receivers are designed for secure, high quality video reception in high multipath and urban environments.

The CDR1 has low power draw, excellent sensitivity, and features such as full frequency band channelization, MPEG2 or MPEG4 video decoder, DVB-T or narrow or ultra-narrow bandwidth settings, QPSK or 16QAM or 64QAM modulation, stereo audio, and auxiliary data channel.

Frequency may be selected locally with front panel buttons or remotely. Eight pre-programmed COFDM configurations are also locally selectable with a front panel button.

CDR1 receivers are designed to withstand harsh environments and are ideal for law enforcement, surveillance, UAV, UGV, military, and other applications requiring high quality video receiver in a compact, rugged package.



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RF Characteristics

Frequency Range (Specify):	UHF:	340.0-399.9 MHz	100 kHz Channels
(Other Ranges Available)	Lower L-Band:	1435-1535 MHz	1 MHz Channels
	Upper L-Band:	1700-1850 MHz	1 MHz Channels
	Lower S-Band:	2200-2399 MHz	1 MHz Channels
	Upper S-Band:	2400-2499 MHz	1 MHz Channels
	Full S-Band:	2200-2499 MHz	1 MHz Channels
	Lower C-Band:	4400-4900 MHz	1 MHz Channels
	Upper C-Band:	4900-4999 MHz	1 MHz Channels
	Full C-Band:	4400-4999 MHz	1 MHz Channels
Frequency Selection (Specify):	Full Band Channelized - Remote Control Only or Remote/Local Control		
Frequency Stability:	±10ppm Over -20°C to +60°C		
Input Impedance:	50 Ω Nominal, VSWR 2:1 Maximum		
Maximum RF Input:	-10 dBm Without Damage		
Noise Figure:	3 dB Maximum		
Image Rejection:	50 dB Minimum		
Signal Bandwidth (Specify):	6/7/8 MHz (DVB-T), 2.5 MHz (Narrow), 1.25 MHz (Ultra-Narrow) - Configuration Dependent		
Signal Strength Output:	Local Displays and Remote Query		
Configuration:	Diversity Antenna		

COFDM Video/Audio Characteristics

Modulation Type:	QPSK or 16QAM or 64QAM - Configuration Dependent		
Output Impedance:	75 Ω Nominal, Unbalanced		
Video Decoding:	MPEG2 (DVB-T, Narrow) or MPEG4 (Ultra-Narrow)		
Frame Rate:	30 FPS (NTSC) or 25 FPS (PAL)		
Horizontal Resolution:	480 Pixel		
COFDM Carriers:	2K DVB-T or Approximately 400 Narrow/Ultra-Narrow – Configuration Dependent		
Guard Interval:	1/4 to 1/16, Configuration Dependent		
Latency:	<100 msec to approx 500 msec, End to End – Configuration Dependent		
Decryption (Specify):	ABS 32-bit or AES 256-bit		
Audio Channels (Specify):	Zero or Two (Stereo)		
Audio Bandwidth:	4 kHz to 16 kHz, Configuration Dependent		
Audio Output Level:	-10 dBV and +4 dBu Line, into 10 k Ω Load		
Audio Output Impedance:	100 Ω Nominal, Unbalanced		

COFDM Auxiliary Data Channel Characteristics

Interface Type:	One-Way UART		
Signaling Type (Specify):	RS232/3.3V TTL, RS485, or RS422		
Supported Data Rates:	9600 Baud		

Configuration Interface Characteristics

Interface Type:	Two-Way UART		
Signalling Type (Specify):	RS232, RS485, RS422, or 3.3V TTL		
Interface Parameters:	9600/8/1/None/None (Baud/Data Bits/Stop Bits/Parity/Handshake)		

Power Requirements

Input Voltage:	+11 to +16 Vdc, Reverse Polarity Protected		
Current Draw:	UHF: 1.0A, Typical @ 12 Vdc	All Other Bands: 1.2A, Typical @ 12 Vdc	
Monitor Supply Output:	+12 Vdc, 0.5A Current Limit		

Mechanical Characteristics

Material:	CNC Machined T6061-T6 Aluminum		
Finish (Specify):	Nickel Plated or Gold Iridite		
Dimensions:	4.5" W x 6.75" L x 1.5" H		
Weight:	<26 oz.		
RSSI Display (Specify):	LCD Analog Bar Meters or LED Light Bars		
Connectors:	RF Inputs:	SMA Female	
	Video Output:	BNC Female	
	DC Supply, 12V Out, Comms:	MDM-9P	
	Audio and Data Output	MDM-9S	
	Audio Output:	3.5mm Stereo Jack	

Environmental Characteristics

Temperature (Operating):	-20°C to +60°C		
Acceleration:	100 g, 3 Axes		
Altitude:	Unlimited		
Humidity:	Up to 95% @ Any Temperature Forming Frost or Condensation		