VISLINK

Mobil Commander

Dual Diversity COFDM Handheld Receiver/Monitor

The Mobil Commander (MobilCMDR) is a ruggedized COFDM (DVB-T compliant) dual diversity handheld receiver/monitor. It offers exceptional RF performance and durability, combined with true ease of operation and superb H.264 decoding. The unit displays received video images on a built-in eight-inch class high brightness display. The display also features an easy-to-use menu-driven interface. The MobilCMDR also is available with AES decryption capabilities for applications requiring it.

The unit includes a wide array of video input and output formats, including ASI and HD/SD SDI. Its milled aluminum chassis and ergonomic hand grips are weather resistant. These features provide an unequaled value in a high quality COFDM receiver/monitor.

Much more than a COFDM handheld receiver, the MobilCMDR can send video over Ethernet to remote software or hardware decoders, allowing multiple remote viewers to monitor the same video simultaneously.

The MobilCMDR is designed with the user in mind, requiring minimal setup to operate. The MobilCMDR includes easy-to-use administration software for advanced functions such as changing frequency plans, AES decryption keys, or unit naming.

The administration software package also allows users to configure and store up to 16 custom preset configurations. The presets can store as little or as much information as the administrator wishes. These values can then be locked in place, providing simple and reliable operation.

The MobilCMDR employs AES encryption preventing unauthorized viewing from decoding or eavesdropping. An information summary can be displayed using the On-Screen Display (OSD) feature. The OSD includes signal strength demodulator lock, decryption active, and decoding indicators. The OSD provides users with full confidence in the operation of the unit.

Key Features

Dual input maximum ratio combining diversity receiver

Unmatched adjacent channel performance

Superior broadcast grade video

H.264/MPEG-4 Part 10

Two mono audio channels

16 user configurable resets

Manual and/or software configurable

Video, audio, data, and telemetry

Easy to use

Web GUI

Typical Applications

Civil, government and broadcast

Options

HD decoding

AES decryption

IP Streaming of MPEG TS

Narrow band reception

Multiple band options

E: sales@vislink.com T: +1 908 852 3700 / + 44 1442 431300   www.vislink.com

Mobil Commander Datasheet

VISLINK

Technical Specifications		
RF Performance		

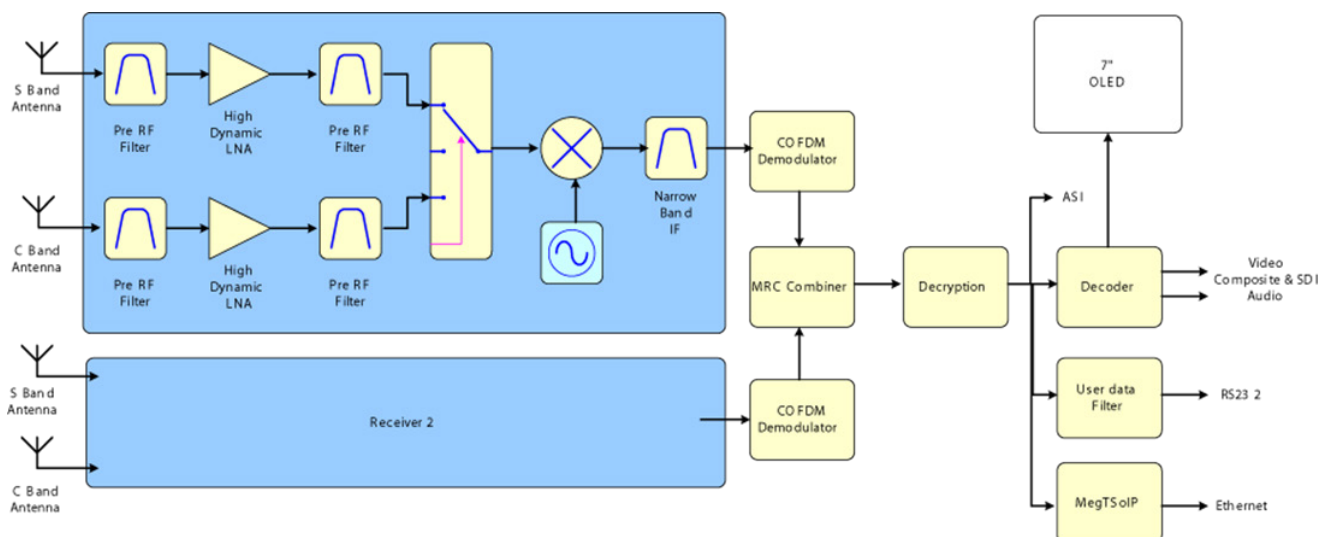| Base Model Number	Frequency (GHz)	Power Use (W)
23MCR	2.200 to 2.400	16
47MCR	4.400 to 5.000	16
58MCR	5.700 to 6.000	16
64MCR	6.425 to 6.525	16
22/47/MCR	2.200 to 2.400/ 4.400 to 5.000	18

Tuning Step Size	250 kHz step size - standard; others available upon request
Frequency Stability	± 10 ppm
Demodulation Modes	Modes are auto detected within modulation format (1, 2, or 3)
Modulation 1	• Formats: COFDM-NB • Carriers: 2K • Constellation: QPSK, 16QAM, 64 QAM • Code Rate: 1/2, 2/3, 3/4, 5/6, 7/8 • Guard Interval: 1/32, 1/16, 1/8, 1/4 • Bandwidth: 6 MHz, 7 MHz, and 8 MHz
Modulation 2 (optional)	• Formats: COFDM (proprietary) • Carriers: 2K • Constellation: QPSK • Code Rate: 1/2, 3/4 • Guard Interval: 1/32 • Bandwidth: 12.5 MHz
Diversity	
Channels	2 input Maximum Ratio Combining
MPEG Decoder	
Video	• Method: MPEG-4 Part 10/H.264 • Video Coding: AVC
Video Output	Composite and SDI
Video Formats	**HD (4:2:0):** • 720p 23.98/24/50/59.94 • 1080i 50/59.94 • 1080p 23.98/24/25/29.97 **SD:** • NTSC 720 × 480 (4:2:0) • PAL 720 × 576(4:2:0
Audio	**Audio Coding:** • ISO/IEC 11172-3 (Layer I/II) **Audio Sample Rate:** • 48 kHz **Audio Channels:** • 1 Stereo or 2 Mono standard **Audio Output:** • Line, gain, selectable **Embedded into SDI:** • Audio re-embedded into SDI output

Mobil Commander Datasheet

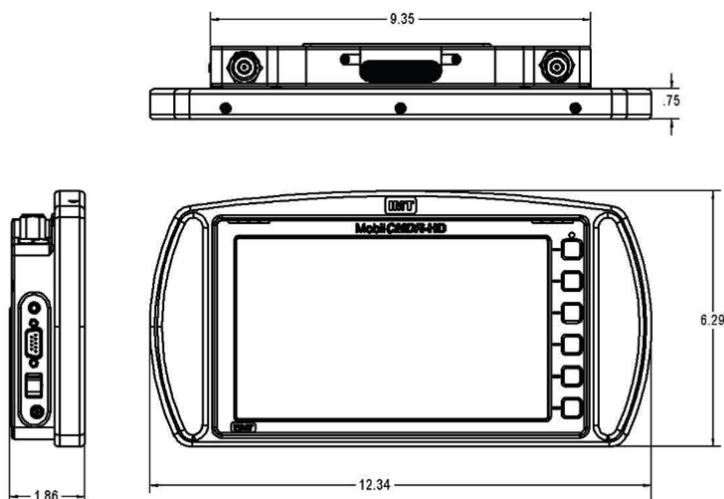| System	
ASI Output	Auto output rate follows modulation or fixed output user selectable (PCR Retime stamp)
Control	• 5 button control (Soft-Programmable) • Remote RS232 • WEB GUI
Low Latency Out	• 4 frames standard • 5 frames PSF format (using Vislink transmitters/*using VSTx or STx
Decryption (optional)	AES block cipher, supporting key sizes of 128 or 256-bit (FIPS PUB 197)
Ethernet (via USB dongle)	• Stream MPEG-TS over UDP • Web control
User Data	• RS232 side channel • 300-115k Baud
Power Requirements	
Input Range	+9 to +32 VDC
Power Consumption	See table above
Environmental	
Temperature Range	Full specification: −30° to +50°C ambient (−22° to 122°F) Storage: −40° to +80°C (−40° to 176°F) Humidity: 0 to 95% non-condensing
Altitude	Operating: 20,000 ft. (6,000 m) Storage: 50,000 ft. (15,000 m)
Physical	
Size	11" W x 5.85" H x 1.85" D (27.7 × 24.7 × 4.7 cm)
Volume	119 cubic inches (1950 cubic cm)
Weight	2.5 pounds (1.13 kilograms)

Block Diagram

Mobil Commander Datasheet

Connectors

These connectors are located inside the rear cover and on the side panel.

	Signal	Connector
Side	Power	Locking power jack, 0.1
	Control/Data - RS-232	DB-9
	Headset	1/8" Stereo Jack
Rear	Ethernet/Remote	RJ-45
	Audio	2 RCA
	Composite	BNC
	SD/HD SDI	BNC
	ASI	BNC

Outline Drawing

Connectors

Side: **Back:**

DC POWER   CONTROL/DATA   POWER SWITCH   HEADSET

ETHERNET   AUDIO   VIDEO   SDI   ASI   SD CARD

Mobil Commander Datasheet

VISLINK

Customize Your Device and Create Your Custom Part Number

- Select the desired Base Model, and then select the desired add-ons from the Options and Accessory tables.
- For example, Part Number: **22/47/MCR**-SD-HD-M02-B2 will contain:
  Base Model **22/47/MCR** and include MPEG4 SD, MPEG4 HD, COFDM Modulation DVB-T, and AES 128-bit Decryption.

Ordering Information

Base Models
Select one base model number:

Base Model Number	Frequency (GHz)
23MCR	2.200 to 2.400
7MCR	4.400 to 5.000
58MCR	5.700 to 6.000
64MCR	6.425 to 6.525
22/47/MCR	2.200 to 2.400/ 4.400 to 5.000

Software Options
Select as many as apply:

Feature	Code	Description
Decoding	SD	MPEG4 SD
	HD	MPEG4 HD
Demodulation	M02	COFDM Modulation DVB-T
	M03	1.25 MHz Narrow Band COFDM DEMOD
Decryption	B2	AES 128-bit Decryption
	B3	AES 256-bit Decryption
MPEG over IP	VIP	Video streaming over IP

Accessory
Select:

Category	Accessory Code	
• Hard Case • Antennas • Battery	MCRX-ACC-HC	Hard Pelican Style Case

E: sales@vislink.com T: +1 908 852 3700 / + 44 1442 431300   www.vislink.com