



Rugged Mobile Digital Video Recorder

MDVR354-RM Series with Removable HDD



Description

Amptronix rugged Mobile MDVR354-RM series supports up to 4-ch recording, features advanced MP4 compression, 640*480 high resolution, and 30FPS per channel. Features also a rugged patent-designed removable hard drive provides high capacity up to 160GB, quality enclosure made to meet harsh environment requirements.

The rugged disk features up to 5,000Gs/0.5ms (non-operating) 300Gs at 2ms (operating) shock resistant and up to 3Gs (2.5~500Hz) non-operating and 0.67Gs (5~500Hz) vibration-resistant. The rugged device is designed to meet the MIL-STD-810F in shocking, vibration, and operating temperature to provide uninterrupted video recording under harsh mobile surveillance environment, such as aviation, military vehicle, school buses, trains, law enforcement, fleet, trucks, and other industrial applications. The device features proprietary software and driver make data transmission secure. System also supports FTP, wireless data transmission, SMS, alarm triggers, motion detections, GPS, GPRS, online and offline tracking. Custom-built housing design such as watertight or weather proof for special applications are also available.

System Highlights

Reliable Embedded System

SoC(System on Chip) design for maximum processing efficiency and operating reliability

Rugged Removable HDD

Designed with wide range of storage and operating temperature; 300Gs(2ms) operating shock resistance and 5,000Gs (0.5ms) non-operating shock resistance; Anti-vibration up to 0.67Gs (5~500 Hz) operating vibration and 3.0Gs (2.5~500Hz) non-operating vibration

Rugged Housing Enclosure

Rugged enclosure design conforms to shock and vibration test to operate under heavy-vibration mobile environment; Operate under wide temperature range for applications in harsh environment

MPEG4 Compression

MPEG4 compression technology for maximum video transmission and storage efficiency

High Resolution 640x480; Scalable 10/15/20/25/30 FPS; Scalable image quality from normal, good to the best

Comprehensive Alarm System

Features motion detection, event trigger recording, video loss detection, pre/post alarm recording, 6 alarm digital inputs and 2 alarm digital outputs recording

Multiple Recording Modes

Records video in continuous mode, time-lapse mode, schedule mode, interval mode, alarm trigger mode or pre/post alarm recording mode in response to events

Multiple Communication Interfaces

Optional GPS, GPRS GPRMC data recording for specific tracking; image and SMS transmission to PC and mobile phone in response to alarms for remote tracking

Networking

Ethernet 10/100 Based-T main connection; DHCP enabled; Optional wireless module

Playback Software

Playback software with event trigger indicators, GPS data, image capture and channel viewing selection, etc.

Tracking Software

Optional tracking software works with GPS data and Map for online tracking, offline tracking and fleet management

Web Control

Optional web control function for remote system control and configuration

Low Power Consumption

Consumes very low power 8~12W for easy integration in mobile or remote site surveillance





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Alarm Configuration Interface



Communication Configuration Interface



Playback Software (Included)

Specification

Video

Compression	MPEG-4
Input	1/4 channels NTSC/PAL auto select, BNC
Output	1 channel NTSC/PAL selectable, BNC
Resolution	640 x 480 @ 5/10/15/20/25/30 FPS
Frame Rate	Selectable 5/10/15/25/30 FPS
Recording mode	Multiple recording, continuous recording, time-laps recording, scheduled recording, event triggered detected recording

Storage

Rugged Removable HDD AP-DVR-HTS6506 up to 160GB; CF card

Back Up

CF Card, mini USB port and Ethernet Port

Display

Real Time

Audio

Input	L/R line input, BNC
Output	L/R line output, BNC

Playback

Search Mode	By date/time/event
Playback Mode	Single channel, full screen, 4 channels
Playback Speed	2x, 4x, 8x, 16x
OSD	on and off
Zoom	Yes

Event & Alarm

Digital Input	6 digital inputs(isolated)
Digital Output	2 digital outputs(relay)
Triggers/Event	Motion detection, trigger detection, video loss recording and pre/post alarm

Peripheral Ports

Serial Port	RS232 x 2 for GPS and GPRS
Control port	RS485

Network Interface

Ethernet 10/100 Base-T; RJ45; Optional WiFi

Mechanical & Environmental

Power Consumption	DC 10~30V, 8~12W
Operating Temperature	14°F~158°F (-10°C~70°C)
Weight	4.19 lbs
Dimensions	9.4" x 6.3" x 2.2"
Vibration Test	3.2Grms in X-Y direction 2.7 in Z over 7 to 500Hz of random vibration Patented Anti-vibration design

PC Software (Included)

Playback Software with event trigger indicators, GPS data, image capture, and channel viewing selection; optional online and offline tracking software available

Removable HDD Specification (Included)

Model Name	AP-DVR-HTS6505-XXX
Interface	IDE/ATA
Capacity (GB)	160/120/100/80/60/40
Sector Size (bytes)	512
Recording Zones	24
Data heads	4/4/3/2/2
Disks	2/2/2/1/1
Max. areal density (GB/sq. inch)	98

Performance

Data Buffer Rate(MB)	8/2
Rotational Speed (rpm)	4200 or 5600
Latency (average ms)	7.1
Max. media transfer rate (Mbps)	380
Max. interface transfer rate (Mbps)	100
Seek time (ms)	
Average (typical)	11
Track to track (typical)	1.0R/1.1W
Full stroke (typical)	20R/21W



Amptronix, Inc.

671 Brea Canyon Rd. Suite 1,

Walnut, CA 91789

Tel: 909.839.2858

Fax: 909.839.2686



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USB 2.0 Cable (Optional)



2-pcs HD Carry Case (Optional)



Rugged Hard Drive



16-pcs HD Carry Case (Optional)

Specification

Power

Requirement	+/-5VDC(+/-5%)
Dissipation (typical)	
Startup (max. peak)	4.5W
Seek (average)	1.7W
Read (average)	1.4W
Write (average)	1.4W
Performance idle (average)	1.25W
Active idle (average)	0.65W
Low power idle (average)	0.45W
Standby (average)	0.15W
Sleep	0.1W
Power consumption efficiency (watts/GB)	0.0038 to 0.0112

Physical Size

Height (Inch)	0.67
Width (inch)	3.15
Depth (inch)	5.12
Weight (lbs)	0.42

Environmental Characteristics

Operating

Ambient temperature	41°F to 131°F 5°C to 55°C
Relative humidity (non-condensing)	8% - 90%
Maximum wet bulb (non-condensing)	85 °F/30°C
Altitude (m)	-300 to 3000
Shock (half sine wave)	300Gs (2ms)
Vibration (RMS)	
Random (RMS)	0.67Gs (5-500Hz)
Swept sine	1G 0-P (5-500Hz)

Non-Operating

Ambient temperature	-40°F to 149°F -40°C to 65°C
Relative humidity (non-condensing)	5% - 95%
Maximum wet bulb (non-condensing)	104°F
Altitude (m)	-300 to 12,000
Shock (half sine wave)	5000Gs/0.5ms
Vibration (Random (RMS))	3.0Gs (2.5-500Hz)

Acoustics (A-Weighted Sound Power (Bels))

Idle (typical)	<2.3
Op (typical)	<2.7

Optional 7" Digital Display with Touchscreen Control and Mount



(Model Illustrated: AP-DVR-PVI-TFT-7T)

Function buttons on touch screen

Idle Mode	[REC] [PLAY] [STOP] [FF] [NEXT]
Recording Mode	[REC] [PLAY]
Playback Mode	[STOP]
	[PLAY] [STOP] [FF] [NEXT]

Connection with DVR

RS232 Cable with our Touch Controller

Power

12V DC
(Optional Digital TFT or Analog LCD display)

