



5308 Mobile Digital Video Recorder

The March Networks™ 5308 Mobile DVR (MDVR) is a robust, four-to-eight-camera system purpose-built for use in bus and light-rail transit systems, first responder vehicles (e.g., police, fire, medical), and other fleet operations. Fully ruggedized yet feature-rich, the 5308 MDVR delivers reliable, high-quality video in installations where other CCTV systems simply can't perform.

Key Features

The 5308 MDVR provides:

- Highest design standards (IP65, J1455 and others) against shock, vibration, dust, water, EMI
- Modular, docking-station chassis for ease of installation/servicing
- Removable power and wiring box for ease of cabling
- J1455-compliant power system with auto-sensing +12 and +24 VDC and internal back-up battery
- Support for up to 8 cameras over both CAT-5 twisted pair or RG-179 coax cable
- Conditioned power for each camera – current limited and software monitored
- Scalable recording: 4 fps on 8 cameras, 15 fps on 4 cameras, 30 fps on 2 cameras
- Programmable increase of recording rate on alarms for high quality event records
- Multiple codec support (H.263, ISO-compliant MPEG-4) for optimized video compression
- Removable, locking hard-drive caddy for ease of video retrieval
- Wireless network option for real-time video monitoring
- GPS option synchronizes video with vehicle location/speed data

The world's toughest, most advanced mobile DVR

With a modular chassis for easy installation and servicing, the 5308 MDVR is designed to the most aggressive standards (IP65, J1455 and others) for shock, vibration, dust, moisture and EMI resistance. Conduction cooling, embedded Linux operating system, and intelligent watchdog circuitry add further reliability. The result is the industry's toughest DVR, able to excel in almost any vehicle or harsh application (e.g., remote or industrial facilities).

The auto-sensing +12 and +24 VDC power system is built for hostile environments. It can handle cold cranking, battery reversal, regulator failures and more. The integrated back-up battery guards against power interruption, and extends video coverage on vehicle shutdown (configurable).

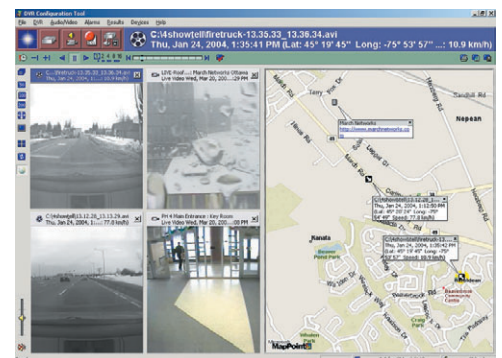
The removable power/wiring box offers video balun technology to direct-connect all 8 cameras over either CAT-5 twisted pair or RG-179 coax cable. Fused, current-limited power for each camera is included, and all power, battery and cameras are fault-monitored in software.

Video resolution and frame rates are configurable as needed on the 5308 MDVR. Using all 8 cameras, capture rates up to 4 fps are available. This can be increased up to 30 fps on two cameras for more demanding environments. Advanced compression stores this video to a tamper

resistant, removable hard-drive. The ruggedized hard-drive caddy incorporates shock and vibration dampening plus heating and cooling functions for reliable drive operation over a greater temperature range.

The 5308 MDVR offers complete networking features, including an optional wireless modem for streaming live video to a central monitoring or storage location. A GPS option allows vehicle location and speed data to be mapped with incoming video for enhanced fleet tracking and event response.

For use as evidence, video images or clips can be exported from the system easily. This and all system functions are access controlled, and managed through powerful March Networks DVR Software, common across all our platforms.





Technical Specifications

5308 MOBILE DVR

Description: The 5308 MDVR is a robust, mobile digital video recorder offering 8 camera inputs (with independent line power), 4 alarms and 2 audio I/O ports, removable video storage, and optional wireless network and GPS connectivity.

Video Interface: Integrated video balun technology, supporting 8 balanced video inputs (NTSC or PAL) over RG-179 coax or CAT-5 twisted pair wiring; 1 software selectable video output for in-vehicle NTSC/PAL display; fixed or event driven

Video Recording: Total of 60 fps for NTSC inputs, 50 fps for PAL inputs; QCIF, CIF, 4CIF resolution supported; flexible allocation; following rates with CIF setting:

4 cameras or less: NTSC - 60 fps across 4 inputs (15 fps per input, 30 fps on 2 inputs); PAL - 50 fps across 4 inputs (12.5 fps per input, 25 fps on 2 inputs)

5 to 8 cameras: NTSC - 4 fps nominal per parallel input (e.g., Group 1/Camera 1 and Group 2/Camera 1), rates remain as above when parallel input unused; PAL - 3 fps nominal per parallel input

H.263 or ISO-compliant MPEG-4 video compression; 5 quality settings; average image size ~2 KB/frame; video signal loss detection; all configurable per camera

Alarms/Relays: 4 transient/surge protected 2-state, dry contact, current loop inputs, supporting open/closed detection; 1 relay switch output (12 VDC/1 Amp); programmable event driven; programmable increase of frame rate on event, to maximum available per camera

Audio Channels: 2 line-level I/O ports; two-way half-duplex communication, synched with video; 4 quality settings; 12 VDC/250 mA provided

Peripheral Ports: 2 RS-232 ports (12 VDC/250 mA provided), for wireless modem and GPS receiver (see Options); 2 RS-485 ports, for PTZ cameras; 1 LED port (12 VDC/20 mA) for in-vehicle system status display

Network Interface: Ethernet: RJ-45 10/100-BaseT main connection; DHCP enabled; optional SNMP configuration; NTP time synchronization

Recording Modes: Continuous, scheduled or driven by external event – alarm, motion detection (full view or masked, with sensitivity), configurable pre- and post-alarm recording; configurable post-vehicle-shutdown recording

Video Display: 1-16 simultaneous windows; any combination of real-time, replay, on alarm or time/date scheduled; accessed via video output in vehicle and/or streamed over wireless network; a 5308 MDVR can also be installed at central facility to accept removable hard-drives and provide video review via LAN; 'investigation mode' provides access to video from any hard-drive caddy

Video Streaming: Scheduled or on demand; unlimited streams; bandwidth limiting at global or camera-specific bit or frame rates; unique adaptive stream for low-bandwidth (wireless) networks

Video Storage: Locking, removable, hard disk caddy with IP65-grade sealing gasket; J1455 shock and vibration drive mounting; temperature control (heating and cooling); enclosed for protection during handling; system shuts down if removed

Video Search: Simultaneous across multiple cameras, using time/date (with time zone reference), camera or any other captured event - alarm, motion detection (full view or masked), activity scan

Video Export: Export JPEG or BMP images and security-sealed¹ .AVI clips with time/date stamp, alarm details, and auto-run Player; DVR Player software also freely downloadable from website

Dimensions: MDVR in docking station: 3.4 in. (h) x 18.4 in. (w) x 17.8 in. (d) / 8.7 cm (h) x 46.8 cm (w) x 45.3 cm (d)

Weight: 30.0 lbs / 13.6 kg

Temperature: Operating; -5 to 115 °F / -20 to 45 °C; monitored, with auto heating/ cooling and software/LED indication; maximum 205 BTU generated per hour (system plus hard drive; excluding cameras); Storage; -40 to 150 °F / -40 to 65 °C

Shock and Vibration:² SAE J1455/MIL-202F/MIL-STD-810

Electromagnetic:² EN55022, CISPR22, FCC Part 15, SAE J1113, J1455, EN61000-3-2/3, EN50130-4

Environmental Protection:² Designed to meet IEC 60529 IP65 test level for Ingress Protection (dust and water)

Power Supply: Fully J1455 compliant; protects against load dump, transients, reverse battery, electrolyte boil-off, brown-out; auto-switches between + 12 VDC and +24 VDC environments; provides +12 VDC (250 mA, current limited) for each camera; field replaceable SLA back-up battery provides stand-by power for 10 minutes full system operation; unit consumption 100 W maximum including cameras

Safety:² EN60950, CSA 60950, UL 60950

Connecting/Protection: All wiring routed through sealed conduit on removable power/wiring box; strain-relieved, insulation displacement terminal block connectors for signal I/O; electronics conformally coated; gas-tight connections can be supplemented with silicon grease (included); automotive-grade battery and power connectors; IP65-grade connectors and gaskets on main unit

Options:² GPS receiver; CDMA 1XRTT and GSM/GPRS wireless modems; 250 mA power provided for each

Ordering Information

Part No.	Description
14096	5308 MDVR with Software ³
14888	5308 MDVR with Software ³ and hard-drive ³
14680	Desktop Cable Kit

Storage Options

Part No.	Description
14411	30 GB mobile hard-drive (removable) ⁴
14412	60 GB mobile hard-drive (removable) ⁴
15032	80 GB mobile hard-drive (removable) ⁴

Notes: ¹ SHA (Secure Hash Algorithm) of Digital Signature Standard [A.S. FIPS PUB 180-1, 1995].
² Contact March Networks for more details.
³ See Price List for more details, including added software and storage options.
⁴ Also see Hard Drives On-line link on our Partner Extranet for more details.

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