

# RideSafe MT Series IP Recorders

4 and 6-camera mobile recording and management solution



Increase passenger and operator safety on-board your mobility vehicles with the March Networks® RideSafe™ MT IP Recorder. Available in 4-channel and 6-channel models, this all-IP recording and management solution lets you capture everything that's happening on the bus, inside and out. Whether you have one bus or a thousand buses, this plug-and-play recorder can operate as a standalone unit (programmable through embedded software), or be remotely managed and monitored daily (through March Networks Command™ for Transit VMS). It can integrate into your existing CAD and AVL systems and mobile routers, or it can operate independently. The recorder's compact size, rugged design (including solid state electronics, integrated power supply, and battery backup), and wide range of interfaces and communications options will meet all of the mobility industry's standards.

### **HELPING YOU SAVE TIME AND MONEY**

Our industry-first GURU app for iOS and Android devices allows you to...

- Check warranty status
- ✓ Initiate an express RMA
- ✓ Get in-field diagnostics support
- Conduct on-board asset tracking



## **Key Benefits**

- Front panel LEDs for easy diagnostics. LEDs convey information about the recorder in general, as well as operational, recording, and export status.
- Embedded, Linux-based, and purpose-built. Spend more time performing investigations and less time dealing with maintenance issues that can plague a PC-based recorder.
- Real-time health monitoring. Be alerted to camera, recorder and network issues within seconds.
- Vehicle metadata integration. Use your CAD and AVL systems to gather operator-initiated tagged events and vehicle data such as GPS, speed and heading, and incorporate that data into the recorder. An integrated accelerometer tags video for hard brakes and other incidents; this allows for re-enactment, driver monitoring and investigations.
- Configurable recording policies. Record video based on user-definable variables like schedule, motion, incident/event, etc.
- Powerful Video Management Software. With March Networks Command for Transit VMS, customers are equipped with the features and tools they'll need to easily manage their entire fleet as well as their fixed surveillance. Features include health monitoring, remote live video access, data logging/ search, fleet revision management, GPS mapping and more.
- Automated video and data extraction. Trigger automatic downloads, via Wi-Fi or 4G network, of critical video when the bus returns to the depot.
- Extended thermal range (ETR) models available. The ETR models contain an industrial SSD instead of a commercial SSD; this allows the recorder to operate better in extremely hot environments and heat up faster under extremely cold conditions.

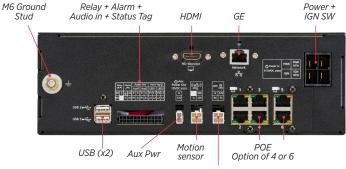
Reduce your security risk, keep passengers and operators safe, and get conclusive evidence about incidents inside, outside, and around your buses.

## RideSafe MT Series IP Recorder

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VIDEO	
Capacity	All models record at full frame rate (30FPS) at 1080p resolution across all channels simultaneously
MT04	4 camera inputs (dual-stream support), 120FPS, IP aggregate bit rate 12Mbps
MT06	6 camera inputs (dual-stream support), 180FPS, IP aggregate bit rate 18Mbps
Camera Licensing	All channel licenses included out-of-box
Video Compression	H.264/MJPEG, support for 2MP (roughly 1080p) to 5MP
Functionality	Automatic, continuous recording on vehicle start; configurable post-vehicle shutdown recording; archival capabilities on alarm/event with programmable, tamper-proof video
Video Output	HDMI
AUDIO	
Compression	G.711, 8Bit/8kHz, 64Kbits/s, unidirectional
Max Dedicated Inputs	Up to 2, unbalanced, $10k\Omega$ , $1Vp$ -p typical
Power for Microphone	Two power output for microphone (12 VDC/1.2 W)
Functionality	Flexible association with video, fully synchronized
NETWORK	
Local Network	10/100/1000Base-T Ethernet (RJ-45)
Camera Network	10/100Base-T Ethernet, IEEE 802.3af POE class 2 (RJ-45)
Security	Password protection, IP address filtering, connection management, NTP time synchronization, DHCP enabled
ALARM INPUTS/OUTPUTS	
Alarm Inputs	2 inputs, transient/surge protected, wet contact, current loop (Molex)
Status Tag Module Support	Supports 2 modules, bi-color output @ 12VDC
Relay Output	1 relay output; contact rating 2 Amp, max 220VDC isolation
Functionality	Video tag insertion, change to recording action, increase of frame rate on event/alarm on a per-camera basis
PERIPHERAL DATA	
USB	USB 2.0, up to 3 (one on front, two on rear)
RS-232	1 port, available through the GPS connector with 12V power output
Ignition Switch	Ignition is used to control power to system, programmable shut down
Accelerometer	Integrated 3-axis, up to +/-16G
Motion Sensor	1 input
Functionality	Video/audio export, wireless network support, GPS data, inertia sensor data, system start-up/shutdown, configurable impact alarm

VIDEO STORAGE	
Internal Hard Drives	1 or 2 2.5" SSDs
Individual Drive Capacity	Up to 2TB
Total Storage Capacity	Up to 3.840TB - 4.096TB
Drive Type	Latest 2.5" solid state 24/7 high-endurance and spinning drives. Contact March Networks for most current available drive offerings.
Caddy	Removable 2 drive capacity, lockable, J1455/EN50155 shock and vibration drive encasement, automatic cessation on removal
Functionality	Mirroring (dual drives), protected area for tagged video, automated retention management pre, post and automatic wireless retrieval options
PHYSICAL	
Dimensions	
Recorder (HxWxD) Caddy (WxD)	3.4 x 10.36 x 10.42 in (8.73 x 26.3 x 26.47 cm) 1.9 x 6.5 in (4.8 x 16.5 cm)
Mounting Options	Driver wall-mount, or shelf-mount with side brackets
Weight	0 SSD: 6.71lbs (3.0kg) 1 SSD: 6.91lbs (3.1kg) 2 SSD: 7.11lbs (3.2kg)
ENVIRONMENTAL	
Operating Temperature	-13° to 131°F / -25° to 55°C
Storage Temperature	-40° to 158°F / -40° to 70°C
Temperature Control	Integrated heater, cold start management, monitored with software/LED indication, high temperature alarm
POWER	
Intelligent Automotive Power Supply	SAE J1455 compliant +9 to +36VDC input can support +7VDC (load dump transients, reverse battery, electrolyte boil-off)
Internal Battery	Brown-out protection, systematic shutdown
Auxiliary Power	12V @ 500mA for external peripherals
Failsafe	Hardware/software watchdog, delayed shutdown failsafe
REGULATORY	
EMC	EN55032, FCC Part 15, EN50130-4, SAE J1113, CISPR25, 2004/104/EC, E-Mark, CE
Safety	EN60950-1, CSA/UL 60950-1
Shock and Vibration	SAE J1455, MIL-STD-810F, EN50155
GENERAL	
Options Ordered Separately	Video Investigation Station; GPS receiver; external 802.11g/n wireless module; spare hard drive caddy; mobile cameras; vehicle cables and harnesses; impact sensors; status and tag

VIDEO CTODACE



GPS + RS-232

#### 3-year warranty on all recorders:

- Options for Repair & Return or Advance Replacement
- March Networks incurs all shipping costs—both ways—for AR's

buttons, spare battery pack, LCD monitor and HDMI cable

• All recorder components are covered, including HDDs

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