RideSafe GT Series Hybrid NVRs

8, 12, 16 and 20-channel Mobile Recording and Management Solution

Increase passenger and operator safety on-board your urban transit buses with the March Networks® RideSafe™ GT Hybrid NVR. Available in 4, 12, 16, and 20-channel models, this true hybrid recording and management solution lets you capture everything that's happening on the bus, inside and out. 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

▼ **True hybrid recording.** The recorder's full hybrid capability lets you migrate from 100% analog to 100% IP video coverage at your own pace.

▼ **Transit-tough.** Able to withstand extreme and demanding continual loads, these embedded Linux-based recorders adhere to J1455 specifications, and provide IP65 protection from dust and moisture. They tolerate severe shock and vibration and have an advanced thermal design to ensure reliability.

▼ **Front panel LEDs for easy diagnostics.** LEDs convey information about the recorder in general, as well as operational, recording, and export status.

▼ **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.

▼ **Powerful Video Management Software.** With Command for Transit VMS, you are equipped with the features and tools you'll need to easily manage your entire fleet as well as your 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.

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

RideSafe GT Series Hybrid NVRs

VIDEO

Capacity	All models record at full frame rate (30FPS) at D1 resolution (4CIF/2CIF/CIF) across all channels simultaneously
GT08A	8 analog, 240FPS, analog only
GT08, IP license	8 analog, 240FPS, IP aggregate bit rate 36Mbps
GT12, IP license	8 analog + 4 POE, 360FPS, IP aggregate bit rate 48Mbps
GT16, IP license	8 analog + 8 POE, 480FPS, IP aggregate bit rate 60Mbps
GT20, IP license	8 analog + 12 POE, 600FPS, IP aggregate bit rate 80Mbps
IP Support/POE Port Expansion	Ability to field upgrade GT08/12/16 with 4-port POE modules
Maximum Analog Inputs	8 provided on all models; additional channels supported through external encoder
IP Camera Support	
GT08	Up to 8 (external IP only)
GT12	Up to 12 (internal or external), total channel limit of 12
GT16	Up to 16 (internal or external), total channel limit of 16
GT20	Up to 20 (internal or external), total channel limit of 20 NOTE: Additional IP channel usage above resident POE ports reduces the number of analog channels supported
Functionality	Automatic, continuous recording on vehicle start; configurable post-vehicle shutdown recording; archival capabilities on alarm/event with programmable, tamper-proof video
Video Compression	
Analog inputs	H.264, CIF/2CIF/4CIF resolution
IP Cameras	H.264/MJPEG, support for 2MP (roughly 1080p) to 5MP
Video Output	Composite or HDMI

AUDIO

Compression	G.711, 8Bit/8kHz, 64Kbits/s, unidirectional
Max Dedicated Inputs	Up to 4, unbalanced, 10kΩ, 1Vp-p typical
Power for Microphone	Four 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	6 inputs, transient/surge protected, dry contact, current loop (Molex)
Status Tag Module Support	Supports 2 modules, tri-color output @ 12VDC
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 5 (one on front, four 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
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 1.92TB
Total Storage Capacity	Up to 3.84TB
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 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)	4.05 x 15.24 x 11.21 in / 10.28 x 38.71 x 28.47 cm
Caddy (WxD)	4.13 x 7.65 in / 10.49 x 19.43 cm
Mounting Options	Driver wall-mount, or shelf-mount with side brackets
Weight	15-17 lbs / 6.8 to 7.7 kg , depending on configuration

ENVIRONMENTAL

Operating Temperature	
HDD-equipped	-13º to 122ºF / -25º to 50ºC
SSD-equipped	-13º to 131ºF / -25º to 55ºC
Storage Temperature	-40º to 158ºF / -40º to 70ºC
Temperature Control	Integrated heater, cold start management, monitored with software/LED indication, high temperature alarm
Protection enclosure	Compliant to IP65 for Ingress Protection (dust and water) with optional back plate, depending on model

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	Camera analog and POE ports fully backed up by battery
Failsafe	Hardware/software watchdog, delayed shutdown failsafe

REGULATORY COMPLIANCE

EMC	EN55022, FCC Part 15, EN50130-4, SAE J1113, CISPR25, 2004/104/EC
Safety	EN60950-1, CSA/UL 60950-1, EN50155 (with use of 50155 compliant power adapter)
Shock and Vibration	SAE J1455, MIL-STD-810F

GENERAL

Options Ordered Separately	Video Investigation Station; GPS receiver; external 802.11g/n wireless module; spare hard drive caddy; 4 port POE module (field or factory upgrade for GT08, 12 and 16), mobile cameras; vehicle cables and harnesses; impact sensors; status and tag buttons, spare battery pack, LCD monitor and HDMI cable

2-year Advance Replacement plan on all NVRs:
- Options for Repair & Return or Advance Replacement
- March Networks incurs all shipping costs—both ways—for AR's
- All NVR components are covered, including HDDs

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