

# RideSafe GT Series Hybrid Transit NVR

## Mobile Recording and Management Solution



March Networks® **RideSafe™ GT Enterprise Hybrid NVRs** deliver video and data that's always there when you need it, along with advanced browser-based tools that allow your fleet to archive, search and produce evidence quickly. Available in 8, 12, 16 or 20-channel models, the recorder's full hybrid capability enables you to migrate your vehicles from 100% analog to 100% IP video at your own pace, and equip your organization with the tools necessary for stable technology growth. Inherent in this future-proof platform is a highly reliable, rugged design that provides feature-rich, world-class robustness. Designed with solid state electronics, an integrated power supply, GPS, battery backup, and a wide range of interfaces and communications options, these new recorders will meet all of the transportation industry's standards, with unequaled performance and management.



### BUILT TO MEET THE DEMANDS OF YOUR ENVIRONMENT

Transit-tough and 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. The GT Series tolerate severe shock and vibration and have an advanced thermal design to ensure reliability. A battery backup system ensures complete system up-time during tough volatile transit power conditions. All this, uniquely packaged in a footprint designed for space-restricted environments.

### ENTERPRISE MANAGEMENT MADE EASY

The Command for Transit Video Management Software combines fleet surveillance with fixed facility management. This truly enterprise solution provides comprehensive "hands-off" transportation video management. Features include health monitoring, remote live video access, data logging/search, fleet revision management, GPS mapping and more. Real-time, secure clients provide system status, alarms and recorded video/data archives with wide-ranging archiving capability. This enables access

to tagged surveillance video and audio evidence along with synchronized vehicle data including date, time and GPS location.

### WE'VE GOT YOU COVERED

The GT Series recorders incorporate impressive, ruggedized features to ensure your data is protected and your hardware continues to function. The internal battery backup guarantees a systematic shutdown in the event of an unexpected power loss, while hard drive mirroring ensures redundancy and storage flexibility. Hardware and software watchdog circuitry ensures that the recorder remains operational. Additionally, secure tunneling grants access only to authenticated users when it comes to devices connected to the recorder's camera network.

### COMPREHENSIVE VEHICLE METADATA INTEGRATION

Easily gather operator-initiated tagged events and vehicle data such as GPS, speed and heading. An integrated accelerometer measures inertia to facilitate video tagging for hard brakes and other incidents, allowing re-enactment, driver monitoring and investigations.

### FEATURES

- 8, 12, 16 and 20-channel models
- 8 analog channels; up to 20 IP channels
- Embedded Linux-based recorders
- Powerful Command for Transit Management software
- Ruggedized, tamper-proof IP65 enclosure models available
- Multi-level H.264 encoding
- Configurable recording policy based on schedule, motion, incident/event, etc.
- Real-time health monitoring with auto-email notifications
- Automated revision management support for easier fleet firmware updates
- Automated video and data extraction over Wi-Fi or 4G network
- Transportable disk caddy for use with Investigation Station
- Local analog / IP video display (HDMI and composite)
- Optional Managed Services

### MODELS

- GT08/GT08A – 8 Channels, 8 analog
- GT12 – 12 Channels, 8 analog with 4 ports POE
- GT16 – 16 Channels, 8 analog with 8 ports POE
- GT20 – 20 Channels, 8 analog with 12 ports POE

Note: Ability to add POE modules/IP capacity in-field for GT08, GT12 and GT16

### 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



Scan the QR code on the recorder to see information unique to the device



# RideSafe GT Series 8/12/16/20-Channel Hybrid Transit NVR

## VIDEO

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

## AUDIO

<b>Compression</b>	G.711, 8Bit/8kHz, 64Kbits/s, unidirectional
<b>Max Dedicated Inputs</b>	Up to 4, unbalanced, 10kΩ, 1Vp-p typical
<b>Power for Microphone</b>	Four power output for microphone (12 VDC/1.2 W)
<b>Functionality</b>	Flexible association with video, fully synchronized

## NETWORK

<b>Local Network</b>	10/100/1000Base-T Ethernet (RJ-45)
<b>Camera Network</b>	10/100Base-T Ethernet, IEEE 802.3af POE class 2 (RJ-45)
<b>Security</b>	Password protection, IP address filtering, connection management, NTP time synchronization, DHCP enabled

## ALARM INPUTS/OUTPUTS

<b>Alarm Inputs</b>	6 inputs, transient/surge protected, dry contact, current loop (Molex)
<b>Status Tag Module Support</b>	Supports 2 modules, tri-color output @ 12VDC
<b>Relay Output</b>	Contact rating 2 Amp, max 220VDC isolation
<b>Functionality</b>	Video tag insertion, change to recording action, increase of frame rate on event/alarm on a per-camera basis

## PERIPHERAL DATA

<b>USB</b>	USB 2.0, up to 5 (one on front, four on rear)
<b>RS-232</b>	1 port, available through the GPS connector with 12V power output
<b>Ignition Switch</b>	Ignition is used to control power to system, programmable shut down
<b>Accelerometer</b>	Integrated 3-axis, up to +/-16G
<b>Functionality</b>	Video/audio export, wireless network support, GPS data, inertia sensor data, system start-up/shutdown, configurable impact alarm

## VIDEO STORAGE

<b>Internal Hard Drives</b>	1 or 2 2.5" SSDs
<b>Individual Drive Capacity</b>	Up to 1.92TB
<b>Total Storage Capacity</b>	Up to 3.84TB
<b>Drive Type</b>	Latest 2.5" solid state 24/7 high-endurance and spinning drives. Contact March Networks for most current available drive offerings.
<b>Caddy</b>	Removable 2 drive capacity, lockable, J1455 shock and vibration drive encasement, automatic cessation on removal
<b>Functionality</b>	Mirroring (dual drives), protected area for tagged video, automated retention management pre, post and automatic wireless retrieval options

## PHYSICAL

<b>Dimensions</b>	
<b>Recorder (HxWxD)</b>	4.05 x 15.24 x 11.21 in / 10.28 x 38.71 x 28.47 cm
<b>Caddy (WxD)</b>	4.13 x 7.65 in / 10.49 x 19.43 cm
<b>Mounting Options</b>	Driver wall-mount, or shelf-mount with side brackets
<b>Weight</b>	15-17 lbs / 6.8 to 7.7 kg, depending on configuration

## ENVIRONMENTAL

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

## POWER

<b>Intelligent Automotive Power Supply</b>	SAE J1455 compliant +9 to +36VDC input can support +7VDC (load dump transients, reverse battery, electrolyte boil-off)
<b>Internal Battery</b>	Brown-out protection, systematic shutdown
<b>Auxiliary Power</b>	Camera analog and POE ports fully backed up by battery
<b>Failsafe</b>	Hardware/software watchdog, delayed shutdown failsafe

## REGULATORY COMPLIANCE

<b>EMC</b>	EN5022, FCC Part 15, EN50130-4, SAE J1113, CISPR25, 2004/104/EC
<b>Safety</b>	EN60950-1, CSA/UL 60950-1, EN50155 (with use of 50155 compliant power adapter)
<b>Shock and Vibration</b>	SAE J1455, MIL-STD-810F

## GENERAL

<b>Options Ordered Separately</b>	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
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