

CM31 Dash Camera Datasheet

Internet-Connected Front-Facing HD Camera Module



The CM31 is a high-definition, Internet-connected dash camera designed to prevent accidents, exonerate drivers, and lower fleet costs. The wide-angle camera captures outward-facing video and automatically uploads and analyzes footage of accidents, harsh driving, and other events of interest. Samsara's intuitive cloud-based software provides reporting tools that enable fleet operators to implement safety coaching programs, prevent accidents, and lower costs.

HIGHLIGHTS

- HD front-facing camera with HDR for night recording
- Automatic uploads of incident footage, plus on-demand video retrieval
- Edge processing to enable real-time event and object detection
- Built-in audio speaker for hands-free, voice-based coaching
- Cloud-based dashboard with reports, trend analysis, and accident reconstruction
- Easy to install, no hard-wiring into vehicle required
- Part of Samsara's complete platform for fleet management, driver safety, and compliance

Technical Specifications

Front-Facing Camera

Field of view	121° (semi-wide angle) front-facing camera
Resolution	High definition (1080p)
Frame rate	30 fps
Low light	HDR to optimize for bright and low-light conditions

Audio Speaker

Built-in speaker	Inward-facing audio speaker for optional voice and tone- based feedback
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Storage, Connectivity, and Compute

Storage	24 hours of 1080p footage (can be extended by configuring video quality)
Connectivity	High-speed 4G LTE wireless connectivity via Samsara VG-series gateways. Data secured via SSL (256-bit, military-grade encryption)
Edge processing	High capacity edge processor to enable concurrent neural networks for real-time artificial intelligence
Automatic upload	Automatically uploads video footage of harsh braking, acceleration, turning, and crashes
On-demand upload	Stores continuous recordings on-camera, available for over-the-air retrieval on demand

Mounting, Enclosure, and Power

Dimensions	Enclosure: 108 x 41 x 61 mm (4.2 x 1.6 x 2.4 in) Cable: 4m (13 ft)
Mounting	Mounts to windshield via industrial-grade adhesive tape (included)
Power	Connects to Samsara VG-series gateway via accessory port (power + data). No additional power source or wiring required
Battery	Internal 1300mAh battery for fallback power when vehicle is off
Operating temperature	-20 to 65º C

Software Features

Software features	HD video playback from any Internet-connected device Safety incident reports, including accident reconstruction Driver safety rankings with scorecards On-demand retrieval (over the air) based on time or
	location Configurable audio coaching plays spoken alerts during unsafe driving behavior (e.g. excessive speeding, unbuckled seatbelts, etc.)

Ordering Information

CM Series Camera Modules

HW-CM31	Samsara Front-Facing Dash Camera
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License

LIC-CM31-ENT	Enterprise license for front-facing CM-series modules, includes hosted software, cellular connectivity, ongoing software upgrades, maintenance, and support
LIC-CM31-EXPRESS	Express license for front-facing CM-series, includes hosted software optimized for small-business fleets, cellular connectivity, ongoing software upgrades, maintenance, and support (Up to 20 units, additional limits apply)

Note: Requires Samsara VG34 vehicle gateway, sold separately.