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

Storage, Connectivity, and Compute

Storage	40 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

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.