

Recording-Strategy Decision Guide

The recording mode is the biggest storage lever you control. Figures are illustrative; pair with the article and your scene.

The four recording modes

Mode	What starts it	Storage vs cont.	Best for
Continuous (24/7)	Always on	100% (baseline)	Entrances, tills, custody, gaming
Motion	Scene change (pixel / AI)	~20-50%	General-area cameras
Event / analytics	A rule or signal fires	~5-25%	Perimeters, restricted zones
Scheduled	Clock / calendar	Depends on hours	Predictable business hours

Always set a pre-event buffer

Any motion or event camera needs a pre-event buffer (pre-roll): a few seconds held in memory so the saved clip starts before the trigger and captures the run-up. Typical 5-15 s pre (about 15 s in RAM) and 10-30 s post. Without it, triggered recording starts late and misses the approach.

The combine-by-camera recipe

Continuous on the few cameras where a missing second is unacceptable. AI-object event or motion + pre-buffer on general areas and perimeters. Scheduled as the wrapper: full recording in the busy window, tighter triggers when closed. Prefer object-based triggers - they cut false starts ~90-95% vs pixel motion.

Worked example - 40 cameras at 2 Mbps

All continuous = ~26 TB / 30 days. Keep 8 continuous (8 x 21.6 x 30 = ~5.2 TB) + 32 on event at factor 0.25 (32 x 21.6 x 0.25 x 30 = ~5.2 TB) = ~10 TB. About a 60% cut, with the cameras that matter still on every frame.

Recording mode is also a privacy lever

GDPR Art. 5(1)(c) (data minimisation) and EDPB Guidelines 3/2019: recording should not run at times or in areas not necessary for the purpose (e.g. consider 'only at night'). The tightest adequate mode collects the least and is easiest to justify.

Your site - assign a mode per camera

Camera / zone	Mode	Pre / Post (s)	Schedule
_____	_____	___ / ___	_____
_____	_____	___ / ___	_____
_____	_____	___ / ___	_____
_____	_____	___ / ___	_____
_____	_____	___ / ___	_____

Illustrative arithmetic on 2026 ranges. Savings depend on scene activity and trigger type. This is engineering guidance, not legal advice - confirm retention and privacy rules with counsel.