

CHM86

Crash Hardened Memory for multi-camera video

Not just a hardened disk.

Evidence outlives the event.



HOW THE RECORDING SURVIVES

RECEIVE

Many camera channels arrive concurrently over a single PoE cable that carries both power and data.

SUSTAIN

11 MB/s written continuously and indefinitely.

SEQUENCE

Files can only be deleted to make room for overwriting with new files.

HOLD

Onboard supercapacitor — a power cut still leaves a readable file.

SCALE

Up to 1 TB in a 4 kg package.

REPORT

A REST API reports storage health, wear and power-on hours, and runs subsystem self-tests.

CRASH SURVIVABILITY

Tested to IEEE Std 1482.1-2013 and FRA 49 CFR Part 229



Fire 750 °C / 60 min, then 260 °C / 10 h · Static crush 110 kN (25,000 lbf) / 5 min
Shock 55 g peak / 100 ms · Penetration 6.4 mm dia. steel bolt, 23 kg (50 lb), dropped from 1.5 m (5 ft)
Fluid immersion 48 h: diesel #1 & #2, water, salt water, oil · Extinguishing agent 10 min · Hydrostatic 15 m / 48 h

SPECIFICATIONS

MECHANICAL & ENVIRONMENTAL

Dimensions (W×H×D)	102.7 × 170 × 102.7 mm
With bracket	150 × 170 × 106.4 mm
Weight	Approx. 4 kg [9 lb]
Housing	Steel / anodised aluminium
Colour	RAL 2003 pastel orange
Protection class	IP67 (memory protection)
Operating temp.	-40 °C to +85 °C
Storage temp.	-55 °C to +85 °C
Humidity	EN 50155, ≤ 75 % annual mean
Elevation	≤ 2,000 m, EN 50125-1 class AX
Shock / vibration	EN 61373 cat. 1, class A
Fire behaviour	EN 45545-2, hazard level 3
MTBF	500,000 h (SN 29500)

ELECTRICAL, INTERFACES & STORAGE

Power supply	PoE, IEEE 802.3af Class 0
Power, maximum	15.40 W
Power, typical	~2.1 W idle, ~3 W under load
Supply voltage	44–57 V nom. (37–57 V range)
Ethernet	1 × 10/100/1000 Mbit/s
Connector X12	M12, 8-pin female socket, X-coded
Service port X16	USB 2.0 host, M8 4-pin female socket
Grounding	M5 stud, min. 10 mm² / AWG 7
Storage medium	Solid-state industrial flash
Capacity	256 GB · 512 GB · 1 TB
Write throughput	~90 Mbit/s (11 MB/s) sustained
File protocols	SMB, NFS (synchronous), web UI
Monitoring	REST API (JSON) and web UI