WattChop | FLIGHT RECORDER

FLIGHT RECORDER

The record your battery warranty depends on. Flight Recorder reads the battery and every component behind it, keeps the data the manufacturer's warranty requires for the full ten-year term, and exports it on request. It runs on the WattChop Drive Controller, or on a compact Flight Recorder Gateway that mounts inside the battery, beside any EMS.

INCLUDED SERVICE

Flight Recorder SLA, 10-year term: recording, retention, export. Site network outages are excluded and logged as gaps.

On WattChop Drive sites, no additional hardware is needed: the Drive Controller is the gateway.

RECORDS.

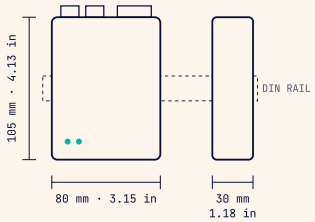
The manufacturer's required warranty points at one-minute resolution, plus second-level detail when a fault needs explaining.

HOLDS.

Buffers on site through network outages and delivers when the connection returns.

PROVES.

Exports on request for warranty claims and audits. The record both sides accept.



OPTIONS

- UL enclosure for mounting outside the battery
- Cellular data plan

Mounts inside the battery enclosure, installed by or with the approval of the battery manufacturer. Read-only on the battery network. No inbound connections.

FLIGHT RECORDER GATEWAY

Processor	Quad-core 64-bit ARM, 2.4 GHz
Memory	4 GB
Storage	32 GB eMMC flash, for on-site buffering
Battery interface	Modbus TCP and RTU
Ethernet	1 × 1 GbE + 1 × 100 Mb (PoE powered)
Serial and I/O	2 × isolated RS-485 or CAN-FD (per port) · 4 × isolated digital I/O, 24 V
Wireless	Wi-Fi 802.11ac · Bluetooth 5.0
Power	12–24 VDC, 3–9 W
Mounting	DIN rail or wall, inside the battery enclosure
Operating temp.	0 to 60 °C, fanless, solid-state
Size	105 × 80 × 30 mm (4.13 × 3.15 × 1.18 in)
Certifications	FCC, CE RED, EN/UL/IEC 62368-1
Security	TPM 2.0 · secure boot · hardware watchdog
Cellular	4G LTE Cat-4 modem built in. Cellular data plan optional.
Data connection	Ethernet, provided by others, unless the cellular data plan is added