

Your Tesla. Your Data. Your Server.

TeslaMate is a free, open-source data logger that records every drive, charge, and vehicle state your Tesla reports — permanently, privately, and on hardware you control.

LICENSE	DATA LOCATION	TYPICAL COST	HISTORY KEPT
Free & Open	100% Yours	~\$5–6/mo	Forever

TeslaMate is a self-hosted data logger and visualization tool for your Tesla. This means every trip, kilowatt, state of charge, charge duration, sleep time, internal and external temperature reading...virtually anything data related is now able to be passively captured for your analysis. Data geeks, rejoice!

Some of the details you'll see, both live and historical:

LIVE STATUS	DRIVE DETAIL	BATTERY HEALTH
85% State of Charge	154 km/h Top Speed Reached	92.5% Battery Health

Everything your car remembers — kept longer than it does

Tesla's own app shows you the last handful of trips before older ones quietly disappear. TeslaMate keeps all of it — drive by drive, charge by charge, forever — in a database that lives on hardware you own or rent, not inside a company's cloud you don't control.

It runs quietly in the background, waking only when your car does, so it adds no meaningful extra drain to the battery. Everything it collects becomes searchable, chartable history: how your battery is aging, what a specific trip actually cost in energy, or exactly where the car has been parked over the last three years.

“It's your car. It should be your data too.”

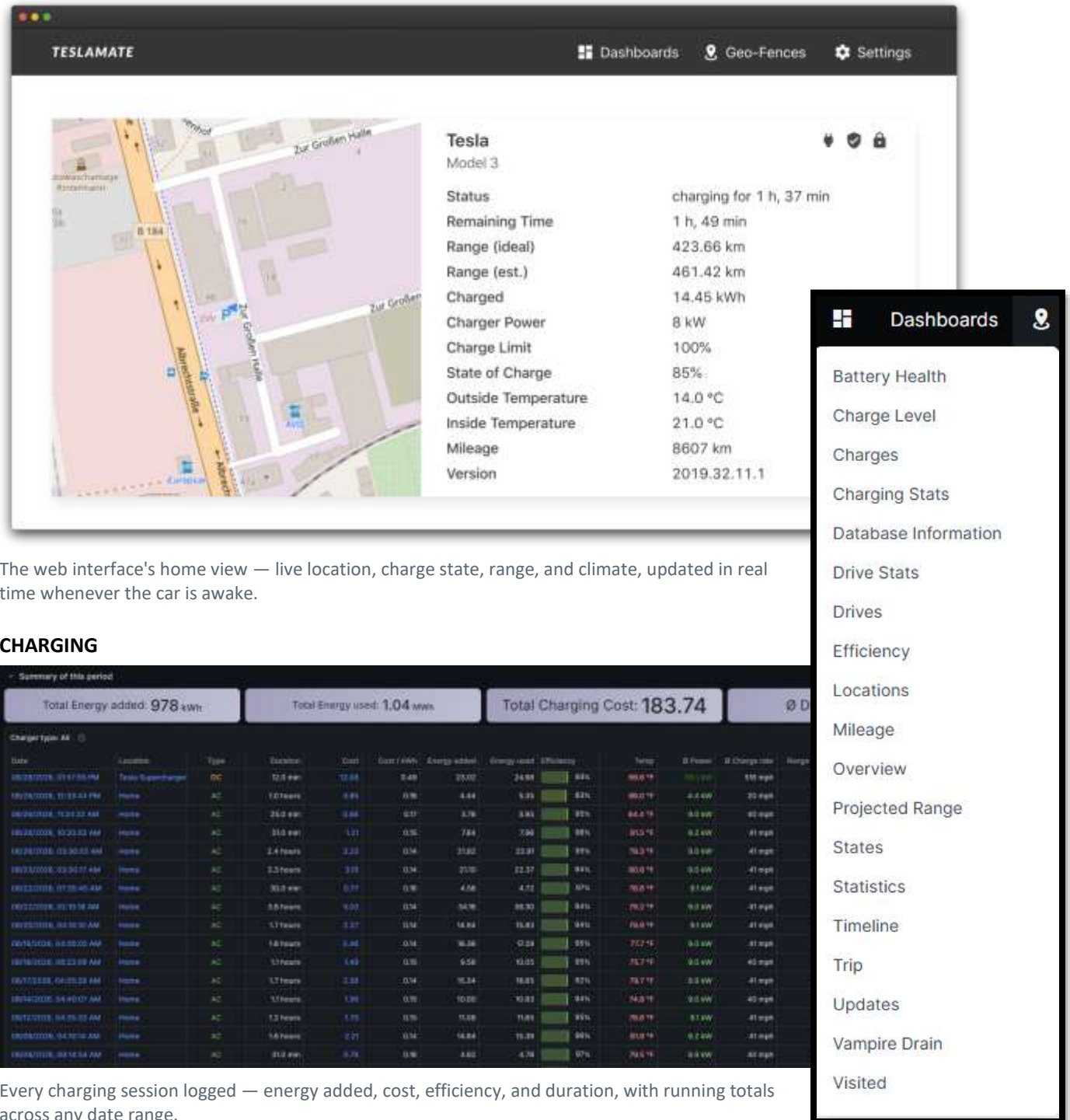
What you get

- High-precision drive & charge history, kept indefinitely
- No added vampire drain — the car sleeps normally
- Automatic address lookup for every stop
- Geo-fencing for custom named locations
- Charge cost tracking, down to the session
- Battery degradation tracked over the life of the car
- Home Assistant & Node-RED integration via MQTT
- Supports multiple vehicles on one account
- Light, dark, or system-matched dashboard themes

Dashboards built from your own history

A live status view, plus nearly two dozen pre-built Grafana dashboards covering drives, charges, efficiency, and long-term battery health.

LIVE STATUS



The web interface's home view — live location, charge state, range, and climate, updated in real time whenever the car is awake.

CHARGING

Summary of this period

Total Energy added:	Total Energy used:	Total Charging Cost:	Ø D
978 kWh	1.04 kWh	183.74	Ø D

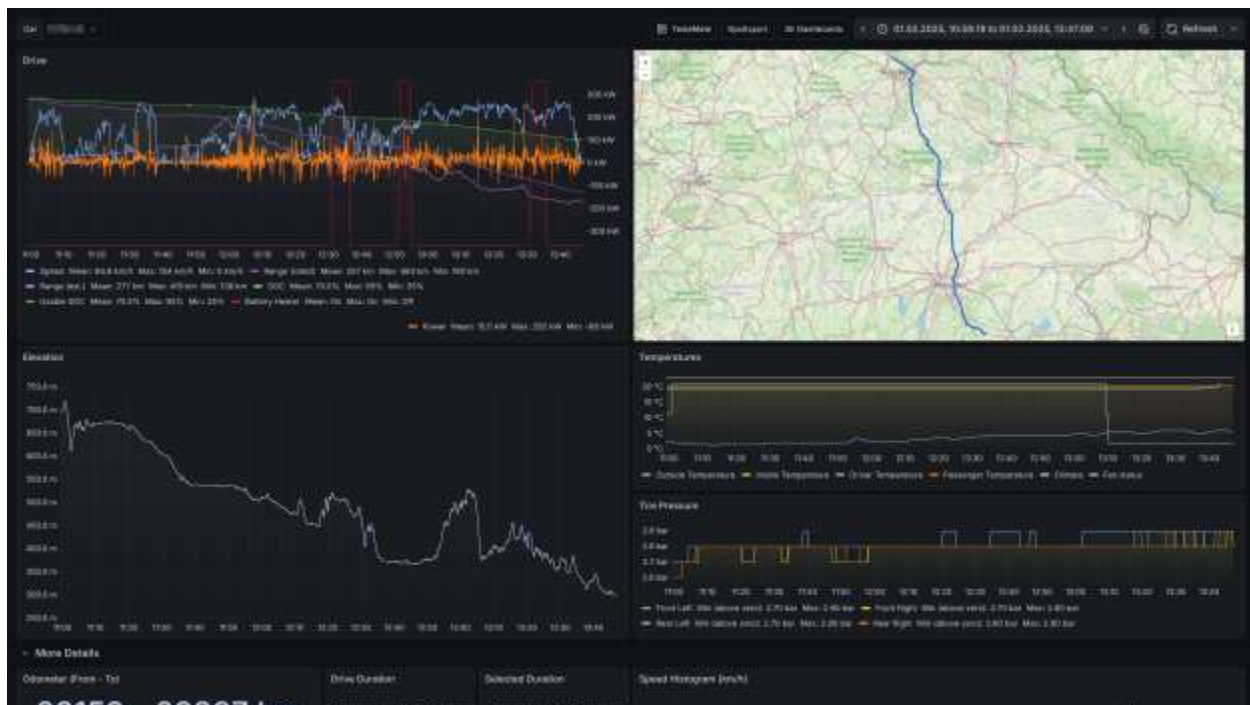
Charger type: AC

Date	Location	Type	Location	Cost	Cost / kWh	Energy added	Energy used	Efficiency	Temp.	B Power	B Charge rate	Range
18/08/2019, 11:17:56 PM	Tesla Supercharger	DC	12.5 km	12.84	0.49	25.02	24.98	99%	16.6 °C	10.0 kW	10.0 mph	
18/08/2019, 10:33:43 PM	Home	AC	1.0 hours	4.85	0.16	4.44	4.39	99%	16.0 °C	4.4 kW	23 mph	
18/08/2019, 11:31:32 AM	Home	AC	25.0 km	0.86	0.07	3.76	3.61	95%	14.4 °C	0.0 kW	0.0 mph	
18/08/2019, 10:25:03 AM	Home	AC	81.0 km	1.21	0.05	7.84	7.94	98%	15.5 °C	0.0 kW	0.0 mph	
18/08/2019, 12:30:03 AM	Home	AC	2.4 hours	2.23	0.04	23.82	23.91	99%	16.3 °C	0.0 kW	0.0 mph	
18/08/2019, 03:34:07 AM	Home	AC	2.3 hours	3.05	0.04	21.00	22.37	94%	16.0 °C	0.0 kW	0.0 mph	
18/08/2019, 07:05:45 AM	Home	AC	30.0 km	0.71	0.05	4.56	4.72	97%	16.0 °C	0.0 kW	0.0 mph	
18/08/2019, 07:19:16 AM	Home	AC	5.6 hours	4.03	0.04	14.96	16.30	92%	16.0 °C	0.0 kW	0.0 mph	
18/08/2019, 02:02:30 AM	Home	AC	1.7 hours	3.27	0.04	16.84	15.81	94%	16.0 °C	0.0 kW	0.0 mph	
18/08/2019, 04:58:00 AM	Home	AC	1.8 hours	3.48	0.04	16.86	17.28	98%	17.7 °C	0.0 kW	0.0 mph	
18/08/2019, 02:23:09 AM	Home	AC	1.7 hours	1.49	0.05	9.56	10.05	95%	15.7 °C	0.0 kW	0.0 mph	
18/08/2019, 04:05:28 AM	Home	AC	1.7 hours	2.38	0.04	16.34	16.83	97%	15.7 °C	0.0 kW	0.0 mph	
18/08/2019, 04:40:07 AM	Home	AC	1.7 hours	1.96	0.05	10.00	10.81	94%	14.8 °C	0.0 kW	0.0 mph	
18/08/2019, 04:35:03 AM	Home	AC	1.3 hours	1.75	0.05	11.09	11.85	93%	16.0 °C	0.0 kW	0.0 mph	
18/08/2019, 04:30:00 AM	Home	AC	1.6 hours	2.21	0.04	16.84	15.39	94%	15.0 °C	0.0 kW	0.0 mph	
18/08/2019, 04:14:54 AM	Home	AC	31.0 km	0.79	0.06	4.82	4.78	97%	16.5 °C	0.0 kW	0.0 mph	

Every charging session logged — energy added, cost, efficiency, and duration, with running totals across any date range.

Live Status screenshot courtesy of the official TeslaMate project — github.com/teslamate-org/teslamate. Charging and dashboard-list views are from a live personal instance.

DRIVE DETAIL



Every drive broken down by speed, power draw, elevation, temperature, and tire pressure — plotted alongside the actual route driven.

BATTERY HEALTH



Long-term battery capacity and estimated degradation, tracked against odometer mileage over the life of the car.

Screenshots courtesy of the official TeslaMate project – github.com/teslamate-org/teslamate

WHAT YOU NEED

Modest requirements, two ways to host it

TeslaMate is a lightweight workload — it doesn't need powerful hardware, just something that stays on.

- 1 vCPU minimum
- 1–2 GB RAM
- 25 GB storage, grows slowly over years
- Docker & Docker Compose
- A domain name, recommended for HTTPS
- 24/7 uptime so it never misses a drive

CLOUD HOSTING

- Rent a small virtual server (e.g. Vultr) for roughly \$5–6/month, all-in
- The provider handles power, networking, and physical hardware
- Reachable from anywhere the moment it's deployed
- Best starting point if you don't already have always-on hardware at home

LOCAL HOSTING

- Run it on a spare computer, Mac Mini, or small Linux box at home
- You take on what a cloud provider normally handles: a reachable IP, port forwarding, and uptime
- Little to no recurring bill beyond a few dollars a month in electricity
- A good fit if you already have suitable hardware sitting idle

Cloud vs. home: the real monthly numbers

Cloud hosting bundles everything into one predictable bill. Home hosting trades that bill for a small amount of electricity — plus whatever the hardware itself cost, if you don't already own something suitable.

CLOUD (VULTR, ALL-IN)	HOME ELECTRICITY (TYPICAL)
\$5–6 / month	\$0.50–1.30 / mo

Device	Typical idle draw	Est. electricity / mo	Approx. hardware cost
Raspberry Pi 5 (8GB)	~4 W	~\$0.52	\$100–120 new kit
Mac Mini (Apple Silicon)	~7 W	~\$0.91	\$0 if repurposed, \$499+ new
Generic mini PC (Intel N100-class)	~10 W	~\$1.30	\$150–200 new, less if used

Electricity estimates use the U.S. national average residential rate of 18.4¢/kWh (EIA, August 2026) and each device running 24/7. Idle power draw is sourced from public third-party measurements and varies by specific model, OS, and configuration — treat these as ballpark, not a guarantee for your exact hardware. Hardware costs are rounded market estimates, not quotes, and don't include your own time to set up and maintain the machine, which cloud hosting mostly removes from the equation.

Two companion guides take you from zero to a working install.

The TeslaMate Install Guide walks through the full setup, cloud or local, start to finish. Supporting TeslaMate covers what comes after: backups, updates, and routine maintenance.

Resource	What it's for
TeslaMate-Install-Guide.docx	Full setup walkthrough, start to finish
Supporting-TeslaMate.docx	Backups, updates & ongoing maintenance
docs.teslamate.org	Official documentation
github.com/teslamate-org/teslamate	Source code & community

Prefer not to run a server at all?

Don't want to get a domain name, find a cloud provider, configure a server, and manage the care and feeding of your TeslaMate environment? A self-managed service can run TeslaMate for you in a shared environment for a low monthly fee.

MyTeslaMate Hosting — \$5.80/mo (or \$4.35/mo paid annually)

<https://www.myteslamate.com/> — a good fit if you don't want a dedicated system, at home or in the cloud (like Vultr), running around the clock just to collect your Tesla's data via its API.

Similar tracking tools

Service	Price
TeslaFi.com	\$8/mo or \$80/yr
Tessie.com	\$6.99/mo or \$69.99/yr or \$199.99/lifetime
TezLabApp.com	\$5.99/mo or \$49.99/yr
Teslascope.com	\$3.99 to \$6.99/mo*

*more equivalent to TeslaMate service.

These are commercial, hosted alternatives to self-hosting TeslaMate — convenient if you'd rather pay a subscription than run infrastructure, though (unlike TeslaMate) your data lives on their servers rather than yours. Pricing shown is as provided and may change; check each provider's site for current rates.