

ANPR GUARDIAN

Number Plate Recognition & Vehicle Access

User Guide & Training Manual

Every vehicle that enters and leaves a site — who, when, how long — with allow and block lists the hub acts on, and reports you can hand to whoever asks.

Version 1.0

Engineer M8 · em8portal.com

ANPR Guardian at a glance

ANPR Guardian reads number plates at a site's entrances and exits. An ANPR camera on each lane sends every plate it reads, with a snapshot, to the EM8 Hub on site; the hub checks the plate against the site's access lists and records the event in the EM8 Portal. The portal then tells you what is on site now, what came and went today, and, over time, who visits, how often and for how long.

Tab	What it does
Dashboard	Today: entries, exits, peak entry and exit times, first-time and returning vehicles, events per hour.
Access Lists	Vehicles on the allowlist or the blocklist, each with a valid date range.
Vehicles	The vehicle register — registration, owner, contact, make, colour, year. A vehicle has to be here before it can go on a list.
Active Session	Vehicles on site right now — entered and not yet seen leaving.
Event History	Every plate read: time, entry or exit, registration, lane, make, colour, fuel, year, snapshot. Searchable, filterable.
Cameras	The cameras on the site, which hub and direction each covers, and the button that points a camera at the hub.
Reports	A day's figures per camera, the top vehicles, make and colour breakdowns, hourly breakdown — exportable as CSV.

- **Nothing to type at the gate** — the plate is the credential. A vehicle on the allowlist is recognised on approach.
- **A block list that is enforced on site** — the hub holds the lists, so a blocked vehicle is flagged the moment it is read, whether or not anyone is watching the portal.
- **Who is on site now** — the Active Session tab is the muster list: everything that came in and has not gone out.
- **Evidence with a picture** — every event carries the camera's snapshot, so "that was not my van" has an answer.
- **Cameras configured from the portal** — the camera's alarm server is pointed at the hub with one click, no laptop in the car park.

How to use this guide: Section 2 is the one-off setup. Sections 3 to 6 follow the tabs. If you only read one, read Section 4 — Vehicles and access lists — because that is where the daily work is.

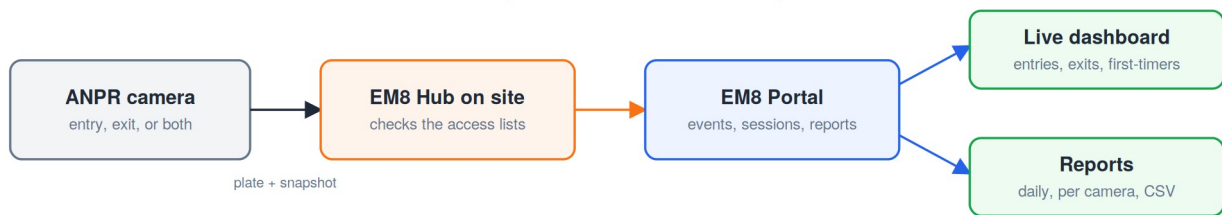
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1. Getting started

How ANPR Guardian works

The camera reads the plate. The hub on site decides. The portal records it.



The camera is pointed at the hub once, from the portal. The hub keeps working if the internet drops and catches up when it returns.

Camera reads, hub decides, portal records.

1.1 Signing in and choosing a site

1. Go to your EM8 Portal address and sign in.
2. From the left-hand menu choose **ANPR Guardian**. You land on your sites — name, postcode, customer, and the number of hubs on each.
3. Click a site. Its dashboard opens with the tabs across the top. **Refresh site data** reloads everything without leaving the page.

Where everything lives

One dashboard per site, seven tabs.

Dashboard	Access Lists	Vehicles	Active Session	Event History	Cameras	Reports
Entries, exits	Allow / block	Registration, owner	On site now	Every read	IP, direction	By day
Events per hour	Date ranges	Make, colour	Entered, not left	Snapshot, lane	Initiate	Top vehicles, CSV

Seven tabs. Access Lists, Vehicles and Event History carry a count badge.

1.2 Who sees what

Everyone on your account with ANPR Guardian access sees the same site and can maintain the vehicle register and access lists. Adding cameras and hubs is done at install by Engineer M8 or your installer.

2. Setting up a site

Engineer M8 supplies and activates the EM8 Hub, and the cameras are fitted by your installer. What remains is telling each camera where the hub is.

2.1 Adding a camera

1. On the **Cameras** tab click to add a camera.
2. Choose the **Associated Hub** on the site.
3. Enter the camera's **IP address**, **username** and **password**.
4. Choose the **direction** it manages: Entry, Exit, or Entry and Exit.
5. Save.

2.2 Initiating a camera

Click **Initiate Camera** on the camera's row. The portal logs into the camera and changes its alarm-server settings to point at the EM8 Hub's local address, so every plate read goes to the hub from then on. Nothing on the camera has to be set by hand.

Use static IP addresses. The camera is pointed at the hub's local IP. If the hub's address changes — a router reboot with DHCP, say — the camera is pointing at nothing until Initiate is run again. Put the hub and the cameras on static local addresses at install and the problem never arises.

Open camera config opens the camera's own web interface if anything else needs adjusting — lens, lane region, sensitivity.

3. The Dashboard

Figure	Means
Daily Entries / Daily Exits	Vehicles read on entry and exit lanes today.
Peak Entry Range / Peak Exit Range	The hour with the most entries, and with the most exits.
First Time Vehicles	Plates never seen at this site before today.
Returning Vehicles	Plates seen before.
Events per Hour	Today's reads by hour — the shape of the day.

First-time against returning is the useful pair. A car park that is mostly returning vehicles is staff; one that is mostly first-timers is visitors, and the peak ranges are when the barrier queue forms.

4. Vehicles and access lists

4.1 The vehicle register

A vehicle has to be on the register before it can be put on a list. The Vehicles tab shows each one with its registration, owner, contact number, make, colour and year.

1. Click **Add Vehicle**.
2. Enter the **registration** (AB12CDE — the format is checked), the owner's first and last name and phone number, and the make, colour and year.
3. Save.

The owner and phone number are what make the register useful at the gate — "whose is the blue Transit blocking bay 4?" is one search.

4.2 Allowlist and blocklist

1. On **Access Lists** click **Add Vehicle**.
2. Pick the **vehicle** from the register.
3. Choose the **Access Type**: **Allowlist** — a recognised vehicle, permitted; **Blocklist** — a vehicle to be flagged.
4. Set the **Valid Date Range** — from when to when the listing applies. A contractor for a fortnight, a tenant for a year.
5. Save. The hub picks up the change and applies it to the next read.

Edit a listing to change its dates; remove it to take the vehicle off the list. The vehicle stays on the register. Search the list by registration, owner, make or colour.

What the hub does with a match is set at install. The lists are the decision; the action — open a barrier on an allowlisted plate, raise an alert on a blocklisted one, or simply record it — depends on what the hub is wired to at your site. Ask your installer what yours does. The portal records the match either way.

4.3 Expiring listings

A listing past its end date stops applying by itself. That is the point of the date range: a contractor's access ends when the job does without anyone remembering to remove it. Use a long range for staff and a short one for everyone else.

5. Active Session and Event History

5.1 Active Session

Every vehicle that has been read on entry and not yet on exit — what is on site now, with the time it came in. It is the muster list in an evacuation, the answer to "is the delivery still here?", and the list of who is still parked at six o'clock. A vehicle that left without being read (a lane the camera missed, a plate obscured) stays on the list until it is next read leaving.

5.2 Event History

Every read at the site, newest first: time, type (entry or exit), registration, lane, make, colour, fuel, year, and the snapshot. Use the quick ranges — last hour, 24 hours, 7 days, 90 days — or set filters: registration, entry or exit, a date range, camera. **All time** removes the date filter and fetches everything.

Click the snapshot to see the picture the camera took. It is the evidence when a read is disputed, and it shows what the camera can and cannot see at night or in rain.

6. Reports

1. On **Reports** pick the **report date**.
2. Read the day: total reads, unique vehicles, and per camera its direction, reads, entries and exits.
3. Underneath: the **hourly breakdown**, the **top 20 most-seen vehicles** with first and last seen, and **make** and **colour** statistics.
4. **Export CSV** downloads the day's events for a spreadsheet.

The top-20 list is where a site learns who really uses it. A vehicle seen forty times in a month that is not on the register is somebody worth adding.

7. Quick reference

7.1 The routine

When	What	Where
New site	Add each camera; Initiate it; check reads arrive in Event History	Cameras
New staff or tenant	Add the vehicle; add to the allowlist with a long date range	Vehicles, Access Lists
Contractor	Add the vehicle; allowlist for the job dates only	Access Lists
Banned vehicle	Add the vehicle; blocklist	Access Lists
Evacuation	Read Active Session	Active Session
A dispute	Find the read; open the snapshot	Event History
Monthly	Run the daily reports; check the top-20 for unregistered regulars	Reports
Hub IP changed	Initiate each camera again	Cameras

7.2 Glossary

Term	Meaning
Read / event	One plate recognised by one camera at one moment, with a snapshot.
Lane / direction	Which way a camera watches: entry, exit, or both.
Hub	The EM8 device on site that receives reads, holds the lists and records events.
Initiate	Pointing a camera's alarm server at the hub, from the portal.
Register	The Vehicles tab — every known vehicle with its owner.
Allowlist / Blocklist	The two access lists. Each listing has a valid date range.
Active session	A vehicle read entering and not yet read leaving.
First-time vehicle	A plate never seen at the site before today.

8. Common questions

No events are arriving from a camera.

The camera is not pointing at the hub. On Cameras click Initiate Camera. If the hub's local IP has changed, that is why — and the fix is a static address.

A vehicle is on the allowlist but was not recognised.

Check the listing's date range is current, and check the registration on the register matches the plate exactly. Then find the read in Event History and look at the snapshot — a dirty or angled plate reads wrongly, and the snapshot shows it.

A vehicle is still on Active Session but it left hours ago.

It was not read on the way out — the exit camera missed it or the plate was obscured. It clears when it is next read leaving. Look at the exit camera's snapshots around that time.

Can I add a vehicle straight to a list?

No — it goes on the register first, then on a list. That is so every listing has an owner and a contact number behind it.

What happens to a blocklisted vehicle at the gate?

That depends on what your hub is wired to — an alert, a barrier that does not open, or just a record. Your installer set it; ask them. The portal records the match either way.

The report is for one day only.

Yes. Run a day at a time, or use Event History with a date range and export that.

A page shows an error after an update.

Refresh the page. This almost always follows a new release and clears once the browser picks up the new version.

Need help? Your Engineer M8 contact is your first port of call for anything this guide does not cover — including feature requests.