

What to buy locally for a GateSetu gate

One lane needs one camera, one edge computer and power that survives a cut. Buy to these minimums from any supplier; brand does not matter. We supply the software image for the computer and set everything up remotely with your electrician on a call. Anything marked **must** is not negotiable — the counting depends on it.

Item	Minimum specification	Why it matters
Camera	4K (8 MP) IP bullet camera. Must: ONVIF Profile S and RTSP; H.265; infrared illuminator that can be switched off in firmware; IP66. Preferred: 2.8–12 mm motorised varifocal lens, PoE.	A plate must be at least 120 px wide from 10 m across a 6 m lane — that needs 4K. Infrared washes out the load in the truck body, so it stays off; light comes from the floods.
Night lighting	2 × 30 W LED flood, 4000–5000 K, IP66, on a photocell or timer, aimed at the lane.	Replaces the camera's infrared. Also a visible deterrent.
Edge computer	Fanless industrial mini PC, Intel N100 (or better) — 8 GB RAM, 128 GB NVMe SSD (must; never a microSD card) , 2 × Ethernet, Wi-Fi, rated to 60 °C, 12 V DC input. Example class: Intel N100 industrial box PCs from any vendor.	Reads plates and judges loads on site, stores seven days of records offline. One lane per N100; a two-lane gate needs two, or an NVIDIA Jetson Orin Nano class box.
Power backup	12 V LiFePO4 battery ≥ 25 Ah (≈ 300 Wh) with a charge controller that exposes mains state (USB-HID or a dry contact). 12 V 5 A industrial power supply; PoE injector for the camera if the cable run exceeds 30 m.	About six hours through a power cut for the 50 W load. The mains signal is how the box reports a power cut as a power cut.
Internet uplink	Any one of: network cable from the site LAN; site Wi-Fi with a good signal at the enclosure; or an industrial 4G router with a local data SIM (~40 MB a day per lane).	The camera is never on the internet — it connects only to the box by cable. Only the box needs a route out, and it buffers seven days if the link drops.
Enclosure	IP66 polycarbonate box with sunshade, sealed or filtered vent, padlock hasp, mounted above 3 m.	Dust, heat, rain and tampering.
Pole and mount	5 m galvanised pole beside the lane (not above it) with a bracket allowing 30° down and 30° across aim.	The geometry lets one camera read the plate and see into the body.
Cabling	Outdoor shielded CAT6 in conduit; surge protection on mains and on the camera line.	Lightning and dust are the two things that kill gate electronics.

Placing the camera

Pole 4.5–5.5 m tall, beside the lane. Tilt about 30° down and pan about 30° across the lane, so the near end of the lane sits in the bottom third of the frame and the far end near the top. A truck stopped at the gate line should fill 40–60 % of the frame width, and the inside of the body must be visible from above. Set stream 1 to 3840×2160, 15 fps, H.265, 8 Mbps; stream 2 to 640×360, 10 fps, H.264. Give the camera a fixed IP on the box's second Ethernet port. We confirm the aim on a live frame during the remote setup.

What we do

Before anything is bought: you send a 30-second video of the lane from roughly where the camera would sit, and we confirm plate reading for your country's plate format. Then we send the software image for the edge computer (a bootable USB; 15 minutes), a printed label for the enclosure, and book the setup call: your electrician mounts and wires, our engineer draws the gate line on the live frame from the phone app, and the first test message arrives on WhatsApp before the call ends.