



AVA™

Autonomous Verified Access



EVERY ENTRY, VERIFIED

AVA Gen4 verifies credentials, detects tailgating, and escalates to SARA Agentic AI. No staffed gatehouse required.



Access Control That Acts

The Cost of a Staffed Gate

Staffing a gate around the clock is expensive, and it's hard to do consistently. Every shift change, absence and vacancy leaves access procedures uneven or the lane unattended.

Even when the booth is covered, manual checks vary from shift to shift. Familiar vehicles get less scrutiny, logs come out incomplete, and an access event is hard to reconstruct afterward. Tailgating often goes unrecorded. So does the visitor who talks their way in.

The result is a gate that costs like security but performs like a formality, without consistent verification or a complete record of each entry.

Autonomous Verified Access

AVA Gen4 verifies every arrival against the access rules set for that entrance. It replaces a staffed gatehouse or works alongside the access control system you already run.

AVA reads credentials at the lane, checks them against the rules, and grants or denies entry. Residents, employees, contractors and visitors each follow a defined access path, and every interaction is logged for review.

AI analytics run on the device, so AVA acts at the gate instead of waiting for someone to review footage. Every hour is covered the same way, at about a quarter of what staffing the lane around the clock costs.

Autonomous Escalation

When something doesn't check out, AVA doesn't just deny entry and wait.

SARA Agentic AI takes it from there. It verifies the event through AVA's cameras and follows the site's response policy, speaking with the person at the lane, sending updates, and contacting the right people for an approval or a security response.

Every step is time-stamped and logged while it happens, so the record's ready before anyone asks for it.



Edge Computing

AVA runs its AI analytics on an NVIDIA Jetson Orin NX system-on-module, so decisions don't wait on a round trip to a remote server.

With the credential database stored on the device, AVA keeps checking credentials and running its configured gate functions through a network outage. Connected communications and remote updates resume when service returns.

Seriously Powerful



AI-Driven Surveillance

Two 5MP PTZ cameras and a front camera with WDR cover the full approach to the gate.



Intelligent Detection

Identifies vehicles, people, license plates and credentials as they arrive at the lane.



Autonomous Intelligent Response

Grants or denies entry against your rules, with no operator in the loop.



Real-Time Audio Deterrent

A 100W speaker and noise-canceling mic array give clear two-way conversation.



Real-Time Visual Deterrent

RGB ribbon lights and a 10-inch screen show status and instructions in daylight.



Command and Control

Manage every gate, rule, message and access list from RADSOC.



SARA™ Agentic AI

Included with AVA. Removes manual monitoring by verifying and responding on its own.

AI-Driven Detection

AVA uses RAD AI analytics to understand what's happening at the lane in real time, so it can act the moment your rules are met. Every analytic runs on the device and is managed through RADSOC.

Credential Verification

AVA accepts PIN codes, QR codes, barcodes, driver's licenses and license plates at the lane, and checks each one against the access rules for that entrance. Residents and employees carry standing access. Visitors, contractors and deliveries can be approved for a set window of time, so the gate expects them before they arrive.

A phone tray at the lane holds a screen steady for the scanner, so a barcode reads the first time instead of the third.

Because the credential database lives on the device, verification keeps working when the network doesn't.

Vehicle Detection and License Plates

AVA detects vehicles as they approach and reads plates at the lane. A known plate can open the gate on its own. An unrecognized plate sends the driver to another credential method, the touchscreen, or SARA for help or escalation, depending on how you set the rule.

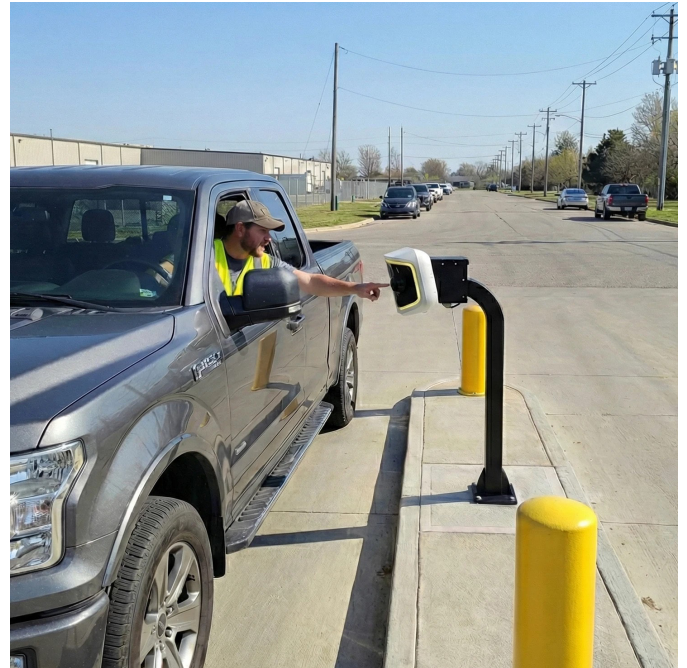
Plate reads are logged with time and image, which gives you a searchable record of who came through and when.

Tailgating Detection

Tailgating is the failure most gates never record. AVA watches the lane through the gate cycle for a second vehicle or a person following an authorized entry.

When it sees one, it logs the event, issues a spoken warning and an on-screen instruction, and has SARA start the site's response. The attempt is recorded either way.

A reader only knows whether a credential was valid. AVA watches the whole gate cycle, so a second vehicle, someone on foot, or someone waiting for the arm to lift all get flagged the same way.



Firearm Detection

When AVA detects a visible firearm in a camera's field of view, SARA prioritizes the event and escalates it under the site's response policy. The event record carries time, location and video for both the response and the review afterward.

Zones and Schedules

Access rules are set by entrance and schedule in RADSOC. A lane can run one policy during business hours and another overnight, and a contractor entrance can carry different permissions from a resident entrance.

Administrators update rules remotely. A change reaches connected devices without a site visit, so a policy decision is live at every entrance the same day it's made.

Every Event, Logged

Every arrival, credential check, denied entry and tailgate attempt is recorded with time, image and outcome, whether or not anyone was watching.

That record's searchable and exportable in RADSOC, so an access question weeks later is answered from evidence rather than memory.

Say Anything, At The Gate

Clear Communication at the Gate

A 10-inch HD touchscreen is the first thing a visitor deals with. It guides them through entry, shows their status in plain language, and connects them with a person or with SARA Agentic AI through two-way audio. A 100W speaker and noise-canceling microphone array hold up in busy gate environments.

RGB ribbon lights carry the same message at a distance and stay readable in direct daylight, so a driver knows whether to pull forward before they reach the screen. Screen content, prompts and messages are managed through RADSoC.

AI-Driven Responses

AVA follows the rules set for each entrance. It grants entry for an approved credential, denies an unauthorized request, displays instructions, and flags activity that needs a security response. SARA verifies the event, engages at the lane and escalates under the site's policy.

Responses are pre-loaded and consistent, so every arrival's handled the same way no matter the hour, and your team only steps in when it's needed.

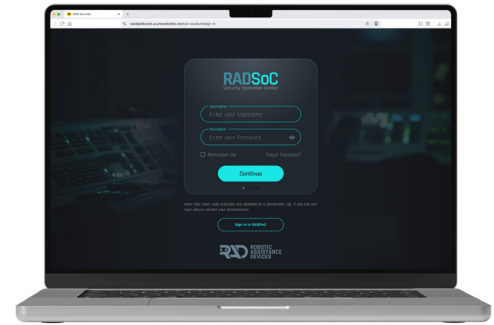
Simple to Deploy

AVA mounts to a standard pedestal with a 5 x 5 inch bolt pattern, and the auxiliary box is built into the bracket. Built-in 4G/5G LTE and Wi-Fi remove the need to trench network cabling or install an on-site server. With power, the mount and the gate interface ready, a lane is operational in under a day.

Software updates arrive over the air. Adding a second entrance is the same job again, not a bigger project.

Unified With the RAD Ecosystem

RADSoC gives a central view of AVA and other RAD devices across a site. The security team reviews gate activity alongside video, device status and incident history, and SARA Agentic AI coordinates the response when activity crosses devices or locations.



Edge AI + RADSoC Management

AVA handles detection and access decisions at the gate, in seconds, even when the network's slow. RADSoC ties it together as the command layer, giving authorized operators and administrators one place to:

- Set access rules, credential methods and schedules
- Update screen content and audio prompts
- Monitor device health and connectivity
- Review and export video clips, plate reads and entry logs
- Follow SARA's escalations and incident records

With SARA Agentic AI included, RADSoC is also where SARA orchestrates cross-device responses and incident workflows in real time.

Built for Multiple Sites

Access lists, schedules and message libraries are set once in RADSoC and applied across every entrance you run, so a policy change reaches all of them at the same time.

Reporting compares entry volume, denied attempts and response times across locations.

How Long Records Are Kept

Full-frame video stays on the device for 21 days. Detection events and user activity are kept for a year, so an access question months later is answered from the record. RAD software supports GDPR erasure requests.

RADPack Gen2 is the brain of the operation. Built around an NVIDIA Jetson Orin NX, it runs AVA's analytics on the device so decisions happen at the gate.

Customizable Ribbon Lights

RGB Neopixel, daylight viewable

Two-Way Audio

100W speaker, noise-canceling mics

Credential and ID Scanner

PIN, QR, barcode, driver's license, LPR



5G or Wi-Fi Connectivity

4G/5G LTE and Wi-Fi

2 x 5MP PTZ Cameras

Plus 2MP front camera with WDR

10-inch Touchscreen

High-definition, multi-language

AVA Gen4 Technical Specifications

Model	AVA Gen4
Cameras	2 x 5MP PTZ, 4x optical zoom
Front Camera	2MP with WDR
Credentials	PIN, QR, barcode, driver's license, LPR

Audio Communications

Output	5.25 in, 100W, moisture resistant
Input	Mic array with DSP, plus omni mic

Display

Panel	10 in LCD touchscreen, HD
Ribbon Lights	RGB Neopixel, daylight viewable

System

Processing Unit	RADPack [™] Gen2
Video Processing	NVIDIA Jetson Orin NX, 16GB
Storage	2TB SSD

Environmental

Operating Temperature	-4°F to 135°F (-20°C to 57°C)
Ingress Protection	IP56, dust and water resistant

Mechanical

Weight	21.2 lbs (9.6 kg)
Dimensions	19.4 x 12.1 x 10.3 in
Mounting	Pedestal, 5 x 5 in bolt pattern

Electrical

Operating Voltage	120 VAC, 50/60 Hz, regulated
Backup Power	LiFePO4 12.8V 3Ah, on outage

Connectivity

Type	4G/5G LTE and Wi-Fi
Bandwidth	300 Kbps to 1.5 Mbps
Off-line Operation	Local checks and gate functions

SARA Agentic AI

Security Incident Response Orchestration



Detection

Immediate threat detection, through AI-driven analytics.



Verification

SARA Agentic AI verifies alerts in real-time.



Deterrence

Autonomous audio and visual pushback to deter intruders.



Escalation

SARA Agentic AI escalates incidents to responders.



Response

Responders receive scene updates and direction.



Resolution

Incident reports are generated instantly.



Real-Time Security, Orchestrated By SARA

SARA follows the response policy set for the site. It cuts manual review of routine events and hands the security team a verified record when they need to step in. RADSOC gives operators a shared view of the event, the communications and the outcome.

See AVA And SARA In Action

See how AVA verifies access and detects tailgating at the lane while SARA Agentic AI engages, escalates and documents the response.

Book a live demo at radsecurity.com. We'll walk through an entrance scenario based on your site.

Full Incident Management

AVA verifies routine arrivals and manages access by each entrance's rules. SARA Agentic AI is included to handle what needs more than a gate decision. It verifies the situation, speaks with people at the lane, contacts the right personnel and documents the response.

Together, AVA and SARA connect access decisions to incident action. There's no license to add and no extra hardware, and the same approach starts at one entrance and extends across gates, other RAD devices and multiple sites.



Robotic Assistance Devices

10800 Galaxie Avenue

Ferndale, MI 48220

877.787.6268

sales@radsecurity.com

www.radsecurity.com

