



FRESH USA
ACCESS SOLUTIONS

FA-900 GatePilot™

Autonomous Access Reader

Autonomous Long-Range UHF
Vehicle Access Control Reader

Integrated reader with embedded controller
and embedded local database in one
standalone device

Configure. Disconnect. Keep Running.



2-Year Warranty



No external control panel or
continuously connected PC required
for normal operation



GatePilot™ Management Software Included

No Monthly Fees. No Subscription Required.

Setup, logs, reports & database management

KEY ADVANTAGES



Up to 49 ft read range



Embedded controller and
autonomous operation



Up to 100,000 authorized tags



Adjustable RF power: 0-33 dBm



12 dBi circularly
polarized antenna



TCP/IP, Wiegand,
2 relays, GPI, RS485



Frequency-offset
anti-interference for
nearby readers



Ideal for residential parking,
garages, gated properties,
and unattended vehicle access



Fresh USA, Inc.

Reliable. Secure. Autonomous.

Built for the way access should work.



FRESH USA
ACCESS SOLUTIONS

FA-900 Technical Specifications

Autonomous Long-Range UHF Vehicle Access Control Reader



PRODUCT & RF PERFORMANCE

	Model	: FA-900
	Product Type	: Autonomous long-range UHF vehicle access control reader
	Frequency	: 902–928 MHz (US)
	Protocol	: ISO 18000-6C / EPC Gen2
	Read Range	: Up to 49 ft (15 m), depending on tag and environment
	RF Output Power	: 0–33 dBm, adjustable
	Antenna Gain	: 12 dBi
	Polarization	: Circular polarization
	Operating Modes	: Active mode, Trigger mode, Answer mode



Designed for autonomous vehicle access with embedded control, adjustable power, circular polarization, and frequency-offset anti-interference for nearby readers.

SYSTEM & INTERFACES

	Interfaces	: TCP/IP (Ethernet), Wiegand, 2 relays, GPI, RS485, power input
	Power Supply	: 12 VDC, 2 A
	Audible Indicator	: Buzzer
	Visual Indicator	: LED light bar
	Firmware Updates	: Supported
	Local Database Capacity	: Up to 100,000 authorized tags at 96-bit
	Data Retention / Offline Cache	: Supported

PHYSICAL & ENVIRONMENTAL

	Enclosure	: ABS front with die-cast aluminum rear housing
	Color	: White
	Protection Rating	: IP65
	Dimensions	: 16.34 × 16.34 × 2.64 in (415 × 415 × 67 mm)
	Net Weight	: 4.4 lb (2.0 kg)
	Package Dimensions	: 16.5 × 13.8 × 4.3 in (42 × 35 × 11 cm)
	Packed Weight	: 7.7 lb (3.5 kg)
	Field-Tested Temperature Range	: -40°F to +140°F
	Warranty	: 2 Years

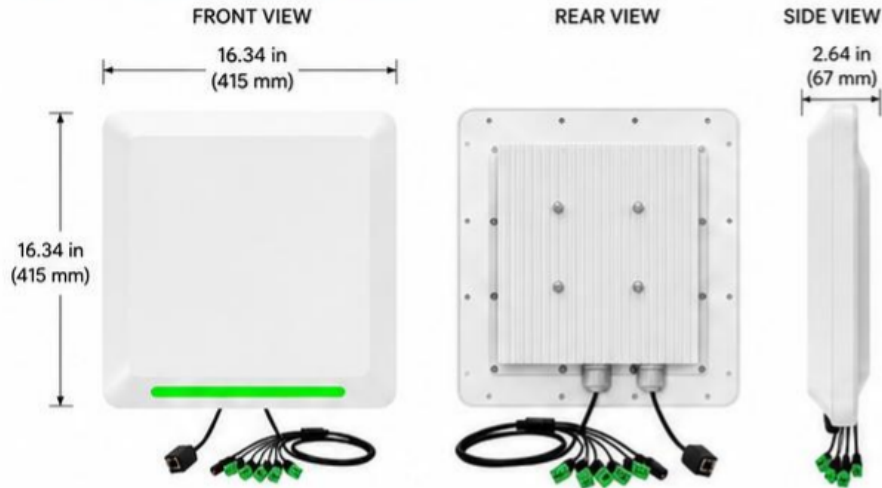


FRESH USA
ACCESS SOLUTIONS

FA-900 System Architecture & Connections

Standalone operation with optional networked configuration.

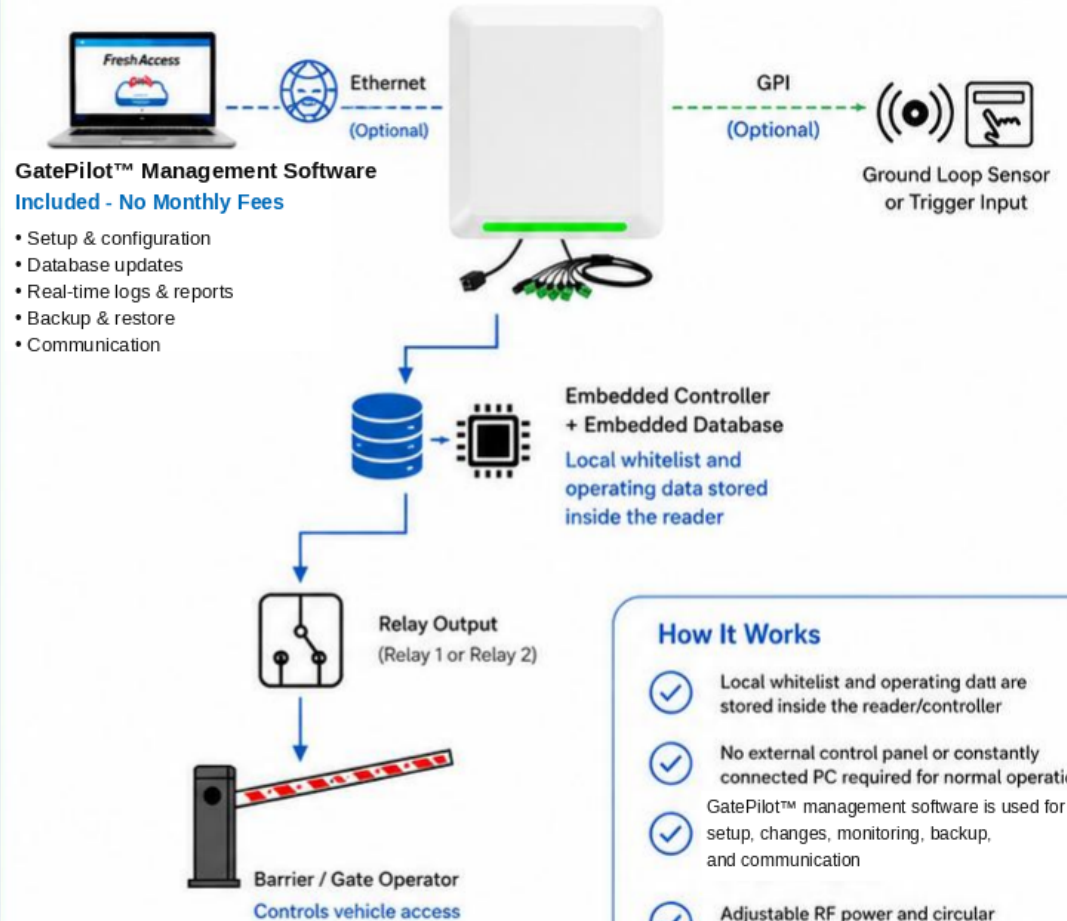
1 FA-900 Dimensions & Views



I/O TERMINAL SUMMARY

	Power	DC+ DC-	
	Relay 1	NO NC COM	
	Relay 2	NO2 NC2 COM2	
	Wiegand	D0 D1 GND	
	GPI	GPI1 GND GPI2	
	RS485	GND RS485+ RS485-	

2 System Architecture & Connections



How It Works

- ✓ Local whitelist and operating data are stored inside the reader/controller
- ✓ No external control panel or constantly connected PC required for normal operation
- ✓ GatePilot™ management software is used for setup, changes, monitoring, backup, and communication
- ✓ Adjustable RF power and circular polarization support reliable read-zone tuning
- ✓ Frequency-offset anti-interference helps nearby readers work side by side

3 Autonomous Workflow (Stand-Alone Operation)





FRESH USA
ACCESS SOLUTIONS

GatePilot™ Management Software Included

No Monthly Fees. No Subscription Required.
Configure. Disconnect. Keep Running.

Dashboard / Overview



Vehicle Owner Management

+ Add Edit Delete Import Export Columns More

#	First Name	Last Name	Mobile Phone	Email	Role
1	Rajiv	Shah	(555) 123-4567	rajiv.shah@example.com	Resident
2	Tan	Smith	(555) 246-8101	tan.smith@example.com	Employee
3	Damon	Lin	(555) 345-1678	damon.lin@example.com	Vendor



FA-900 operates autonomously after configuration. No external control panel or continuously connected PC is required for normal gate operation.

Use GatePilot™ Management Software for configuration, database updates, real-time logs, reports, backups, and maintenance.

Included. No Monthly Fees.

Whitelist and Blacklist Management

Category	Vehicle	Expires	Owner
Whitelist 108	U8	Expires 2025-09-30	Owner: Lin
	U9	Expires 2025-09-30	Owner: Lin
	C001	Expires 2025-09-30	Owner: Acme Corp.
	HR26D9551	Expires 2025-10-01	Owner: Smith
Blacklist 18	DUAC0012B	Expires 2025-10-01	Owner: Shah
	B001	Expires 2025-10-01	Owner: Boo
	Y9960F43	Expires 2025-10-02	Owner: Smith
	BLK12345	Blacklist	Owner: Blacklist

Entry and Exit Records

Search plate or owner... All Types All Lanes 2024-10-11 to 2024-10-11 Refresh

Plate Number	Entry Time	Entry Lane	Exit Time	Exit Lane	Type	Direction
HR26D9551	2024-10-11 11:16:02	Entry Booth	2024-10-11 11:47:07	Exit Booth	Default	Entry
Y9960F43	2024-10-11 11:15:24	Entry Booth	2024-10-11 11:45:06	Exit Booth	Default	Entry
U9	2024-10-11 11:13:47	Entry Booth	-	-	Default	Entry
B001	2024-10-11 11:13:11	Entry Booth	2024-10-11 11:31:21	Exit Booth	Default	Entry
C001	2024-10-11 11:12:03	Entry Booth	2024-10-11 11:16:55	Exit Booth	Default	Entry

Management Software Capabilities

- Reader communication over TCP/IP
- Vehicle and credential management
- Real-time event review and history lookup
- Database backup / restore
- Easy parameter changes and updates
- Useful for setup, maintenance, and support

On-Site Vehicle Statistics

Region: Default Region Occupied Empty Total: 100 Occupied: 97

001	002	003	004	005	006	007	008	009	010	011	012	013	014	015
016	017	018	019	020	021	022	023	024	025	026	027	028	029	030
031	032	033	034	035	036	037	038	040	040	042	042	043	045	
046	047	048	049	050	051	052	053	054	055	056	058	069	060	
061	062	063	064	065	066	068	069	070	071	072	072	074	075	
076	077	078	079	080	081	082	083	084	085	087	088	089	090	
091	092	093	094	095	096	097	098	099	100					

Charging Rules

Charge Rules

User Charge Rule

Maximum charge for single entry and exit: 10.00 (Per use/vehicle)

Maximum charge for multiple entries and exits in one day: 25.00 (Per vehicle/day)

Free time: 15 Minutes, charge: 0.00

Free period: 60 Minutes, charge: 0.00

Every day free charge period: 00:00 To 06:00

Parking over: 240 Minutes, charge: 20.00

Recurring billing: No loop Include existing vehicles in the first paragraph

Save Cancel

Data Backup and Restore

Backup

Restore

Scheduled Backup

Backup Location: D:\Backup\FA900\ Browse

Backup Now

Last Backup: 2024-10-10 23:15:08

Auto Backup (Daily) ☒

Keep Last: 7 Days of Backups

7 Days



Autonomous Reader



Management Software
No Monthly Fees



100,000 Tags



2-Year Warranty



Fresh USA, Inc.

Reliable. Secure. Autonomous.

Built for the way access should work.