Carrier-Grade Network AAA for Modern CSPs

DATASHEET

Secure, Scale, and Optimize Network Access

Alepo's AAA Server provides enterprise-grade security, robust authentication, authorization, and accounting for millions of subscribers, scaling seamlessly with your business and enabling rapid deployment of revenue-generating services.

The platform offers carrier-grade performance on any infrastructure, supporting deployments on-premises, in virtualized (NFV) environments, or in the public or private cloud (containers or virtual machines).

| **99.999%** Availability | **36,000+** TPS Capacity | **Sub-ms** Latency |

KEY CAPABILITIES

- **Dual-Stack Protocol Support:** RADIUS, Diameter, and TACACS+ on unified platform

- **5G-Ready Cloud-Native:** Cloud-native architecture with 3GPP R15/R16/R17 compliance

- **Vendor Neutral:** Standards-based compatibility eliminating lock-in

- **Multi-Service Support:** Supports all access technologies

- **Real-Time Policy:** Dynamic charging integration with zero leakage

- **Scalability:** Stateless design with centralized database clustering

- **Intelligent Operations:** Self-healing with centralized management

- **Usage Monitoring:** Enforces fair use policies with detailed tracking

STANDARDS & PROTOCOLS
- RADIUS, Diameter dual-stack
- TACACS+ network device security 3GPP interfaces
- ETSI & CNCF compliance Rich RESTful APIs
- SNMP, REST, OAuth2, OIDC/SAML

SUPPORTED NETWORKS
- 3G, 4G/LTE, and 5G mobile networks
- FTTx, xDSL & DOCSIS broadband
- Carrier Wi-Fi & 5G Fixed Wireless Access
- Private 5G and enterprise networks
- Large-scale M2M & IoT connectivity

ADVANCED SECURITY & POLICY
- Real-time dynamic quota & QoS
- Zero-leakage session management
- Intelligent noise reduction
- Fair usage policy (FUP) enforcement
- High-Performance Scripting Engine

INTEGRATION & MANAGEMENT
- Web-based admin portal
- Oracle, MariaDB & MySQL support
- SNMP, Prometheus & Grafana
- High Availability
- Geo-redundancy

DEPLOYMENT OPTIONS
- Cloud agnostic (Private Cloud, SaaS, Hybrid)
- Container ready (Docker/Kubernetes)
- NFV compliant
- Bare metal support

SUPPORTED USE CASES
- Broadband data services (FTTx, xDSL, DOCSIS)
- Mobile core integration & 5G Fixed Wireless Access
- Carrier & enterprise Wi-Fi (Roaming, VoWiFi, Hotspots)
- Large-scale M2M & IoT device authentication

BUSINESS BENEFITS

Alepo AAA Server: Secure Access, Simplified Operations

OPERATIONAL EXCELLENCE
Self-healing architecture with 99.999% availability reduces manual intervention while centralized management and AI-driven troubleshooting streamline operations.

REVENUE ENABLEMENT
Real-time integration with charging systems enables dynamic service offerings and accelerates deployment from months to days.

COST OPTIMIZATION
Consolidate multiple AAA systems onto one platform with flexible deployment options that optimize infrastructure costs.

ENHANCED SECURITY
Advanced security features, secure APIs with RBAC, and and audit trails protect against attacks while maintaining performance and compliance.

> "Alepo's AAA has enabled Wind Telecom to streamline processes by introducing automation at every level, and we're already reaping the benefits of their modern and advanced solution."
>
> — Director Network Operations, Wind Telecom

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