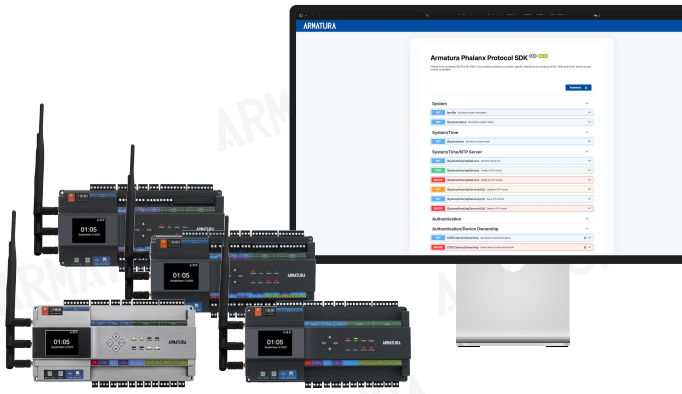
ARMATURA PHALANX

Phalanx Protocol SDK (Controller Webserver API)

PSIA-Compliant RESTful API for Access Control Controllers

• Open Standard • RESTful • Highly Secure • Developer-Friendly



Overview

Armatura Phalanx Protocol SDK is Armatura's official implementation of the Physical Security Interoperability Alliance (PSIA) standards. It is specifically built upon the PLAI (Physical Logical Access Interoperability), Area Control, Common Security (CSEC), and Common Metadata Event specifications, delivering full compliance with the industry's most widely adopted open interoperability framework for physical security devices.

Designed as a modern, developer-first solution, the Phalanx Protocol SDK provides a complete, standardized RESTful Web API that enables seamless, bidirectional communication between third-party systems and Armatura's intelligent access control hardware. Whether integrating with Access Control Systems (ACS), Video Management Systems (VMS), Parking Systems, Building Management Systems (BMS), PSIM platforms, enterprise software solutions, or fully custom-developed applications, Phalanx eliminates the need for proprietary drivers, middleware, or complex integration layers.

The protocol supports the full spectrum of access control operations — including credential and credential holder management, time schedules, holidays, permissions, access levels, partitions, door/portal control, anti-passback, and real-time event monitoring — all through clean, well-documented HTTP/HTTPS endpoints using standard XML payloads defined by PSIA schemas.

By adopting the Phalanx Protocol SDK, system integrators and software developers gain direct, high-performance access to Armatura's AHSC-1000 Controller and AHDU Series Controllers. This open approach dramatically reduces integration time and cost while ensuring long-term scalability, future-proofing, and true vendor-agnostic flexibility in building sophisticated security ecosystems.

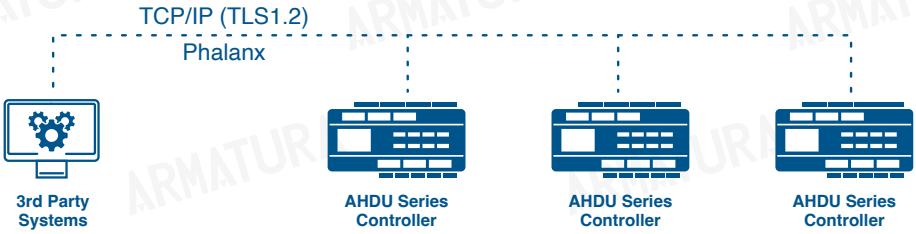
Supported Products

AHSC-1000 Controller & AHDU Series Controller

Features

- **Full PSIA Compliance** Certified implementation of PSIA Area Control Specification 3.1, PLAI, CSEC, and Metadata Event standards.
- **RESTful Web API** Modern HTTP/HTTPS-based API with full Swagger (OAS 3.0) documentation. Supports standard XML payloads and full CRUD operations for all access control entities.
- **Comprehensive Access Control Functions**
  - Holidays & Time Schedules management
  - Credential & Credential Holder management
  - Permission, Access Level & Partition control
  - Door/Portal override & real-time status monitoring
  - Support for multiple credential types (Card + PIN + Biometrics)
- **Real-Time Event Streaming** Supports PSIA Metadata Event sessions (synchronous & asynchronous) for live access events, alarms, and system status.
- **Advanced Security Model**
  - Issuer-Signature authentication
  - Device Ownership & CSEC permission model
  - TLS encryption and secure session management
- **Developer-Friendly Integration**
  - Complete API reference via Swagger UI
  - Full PSIA XML schema support
  - Easy integration with any modern programming language or platform
- **SDK Customization Services** Armatura offers professional SDK customisation services to tailor the Phalanx Protocol to specific integration requirements and unique project needs.
- **Scalable & Interoperable** Designed for seamless integration with third-party ACS, VMS, BMS, PSIM, and custom enterprise applications.

Deployment



- AHDU controller embedded web server acts as a system server and communicates with 3rd-party systems through the Phalanx API.
- All communications are encrypted using TLS 1.2 and HTTPS.

General Information

Supported Products	AHSC-1000 Controller, AHDU Series Controller
Protocol	Armatura Phalanx Protocol (PSIA/PLAI compliant)
API Type	RESTful Web API (HTTP/HTTPS)
Data Format	XML (per PSIA schemas)
Authentication	Basic Auth, Issuer-Signature, CSEC Device Ownership
Event Streaming	PSIA Metadata Event sessions (TCP/UDP/raw data support)
Supported Resources	Area Control (Holidays, Time Schedules, Permissions, Credentials, Doors, etc.) Metadata (Sessions & Streams) CSEC Security Model
Documentation	Full Swagger UI + PSIA XSD schemas

3rd-Party Integration

Standards Compliance	PSIA Area Control 3.1, PLAI, CSEC, Common Metadata Event
Integration Method	Direct RESTful API (no middleware required)
Supported Systems	Any PSIA-compliant VMS, PSIM, BMS, or custom applications
Authentication & Security	Issuer-Signature, CSEC, TLS 1.2+
Event & Alarm Integration	Real-time metadata streaming via PSIA sessions
API Documentation	Complete Swagger UI + XML schema reference

Data Protection

Standards	PSIA (Area Control, CSEC, Metadata Event)
Communication Security	HTTPS, TLS encryption
Authentication	Issuer-Signature, CSEC permission model, Device Ownership
Data Protection	Secure session management, encrypted credential handling

Address:190 Bluegrass Valley Parkway Alpharetta, GA 30005
Phone: + 1 (470) 816-1970
Email: sales@armatura.us
Website: www.armatura.us