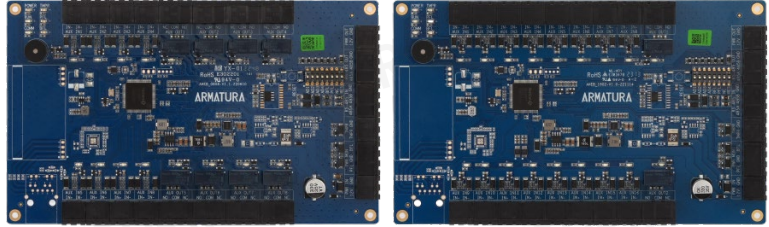


## AHEB Series I/O Expansion Board

- Scalable
- Supervised Inputs
- 3rd Party Integration
- Certified OSDP Communication



### Key Features

#### Advanced Security

AHEB I/O expansion boards can communicate with AHSC-1000 or AHDU series controllers through OSDP V2.2 over RS-485. The communication is secured with AES128 encryption. Enhanced encryption levels are provided by an additional crypto chip (Certified EAL6+ standard), offering dedicated storage and cryptographic functionality for all Armatura controllers and expansion boards.

#### Innovative System Management Hierarchy

The AHEB series I/O expansion board can be monitored and updated through encrypted RS-485 communication by the AHSC-1000 and AHDU controller series onboard webserver. It supports communication with the Armatura One security system and will soon support Cielo365 as well, using the AHSC-1000 and AHDU Series controller.

#### Scalability

The AHEB series supports up to 388 inputs or 196 outputs when used with a single AHDU controller. In a combination of AHSC-1000 and AHDU series controllers, it can ultimately handle up to 12,801 inputs or outputs. All communications are securely protected by AES128 encryption.

#### Supervised Inputs

The AHEB I/O expansion board series is equipped with 4 state-supervised inputs, designed to mitigate short-circuit attacks effectively. These inputs can detect abnormal changes, even as low as 5% Ohms in the circuits, and efficiently filter out all potential attacks. Isolated microchips independently manage REX inputs and dedicated fire alarm inputs, ensuring their uninterrupted functionality even under extreme situations.

#### 3rd Party Integration

The AHEB series supports various inputs and outputs, making it suitable for a wide range of security devices. The Armatura One system offers a RESTful API for seamless integration with 3rd Party Software.

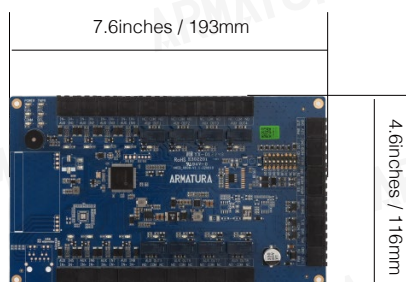
#### Universal Voltage

Supports 12 to 24Vdc inputs making it the ideal choice for universal deployment, eliminating the need for additional power adaptors.

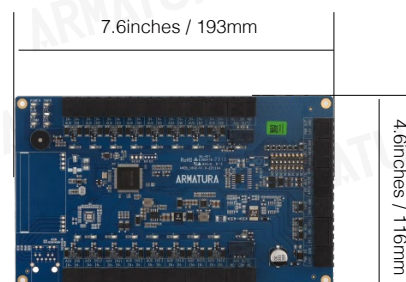
#### Programmable Input States with Time Zone Management

The AHEB series offers supervised and programmable input states, including In-Active, Active, Short, and Open. Users can easily configure these input states and input time through the Armatura One security platform.

### Dimensions of Expansion Board



AHEB-0808



AHEB-1602

General Information		
	AHEB-0808	AHEB-1602
Primary Power	12 - 24 VDC ± 20%, 550 mA maximum	
RS-485 Connectivity	Input: RS-485 standard / OSDP V2.2 (Dedicated for AHSC-1000/ AHDU series controller communication) Output: RS-485 standard / OSDP V2.2 (Dedicated for AHEB series I/O expansion board communication)	
Number of Ports	1*RS-485 8*supervised input (AUX IN) 8*relay output (AUX OUT) 1* power Input (PWR IN) 1*power output (PWR OUT) 1*power detection (AC Fail) 1* backup battery detection (BAT Fail) 1*tamper input (TMPR)	1*RS-485 16*supervised input (AUX IN) 2*relay output (AUX OUT) 1* power Input (PWR IN) 1*power output (PWR OUT) 1*power detection (AC Fail) 1* backup battery detection (BAT Fail) 1*tamper input (TMPR)
Inputs	8 inputs 4 state supervision, resistor values (5% tolerance), Normally open contact: use 1.2k, 2.2k, 4.7k or 10k Normally closed contact: use 1.2k, 2.2k, 4.7k or 10k	16 inputs 4 state supervision, resistor values (5% tolerance), Normally open contact: use 1.2k, 2.2k, 4.7k or 10k Normally closed contact: use 1.2k, 2.2k, 4.7k or 10k
Outputs	8 relays 8* Form-C with dry contacts	2 relays 2* Form-C with dry contacts

AHSC/ AHDU Interface		
	AHEB-0808	AHEB-1602
RS-485 Protocol	AES-128, OSDP V2 Secure Channel	
OSDP Mode	9600-115200 bps, OSDP V2.2, asynchronous, half-duplex, 1 start bit, 8 data bits, and 1 stop bit. Maximum cable length: 2,000 ft. (609.6m)	
Data Inputs	OSDP supported. Maximum cable length: 500 ft. (152m)	

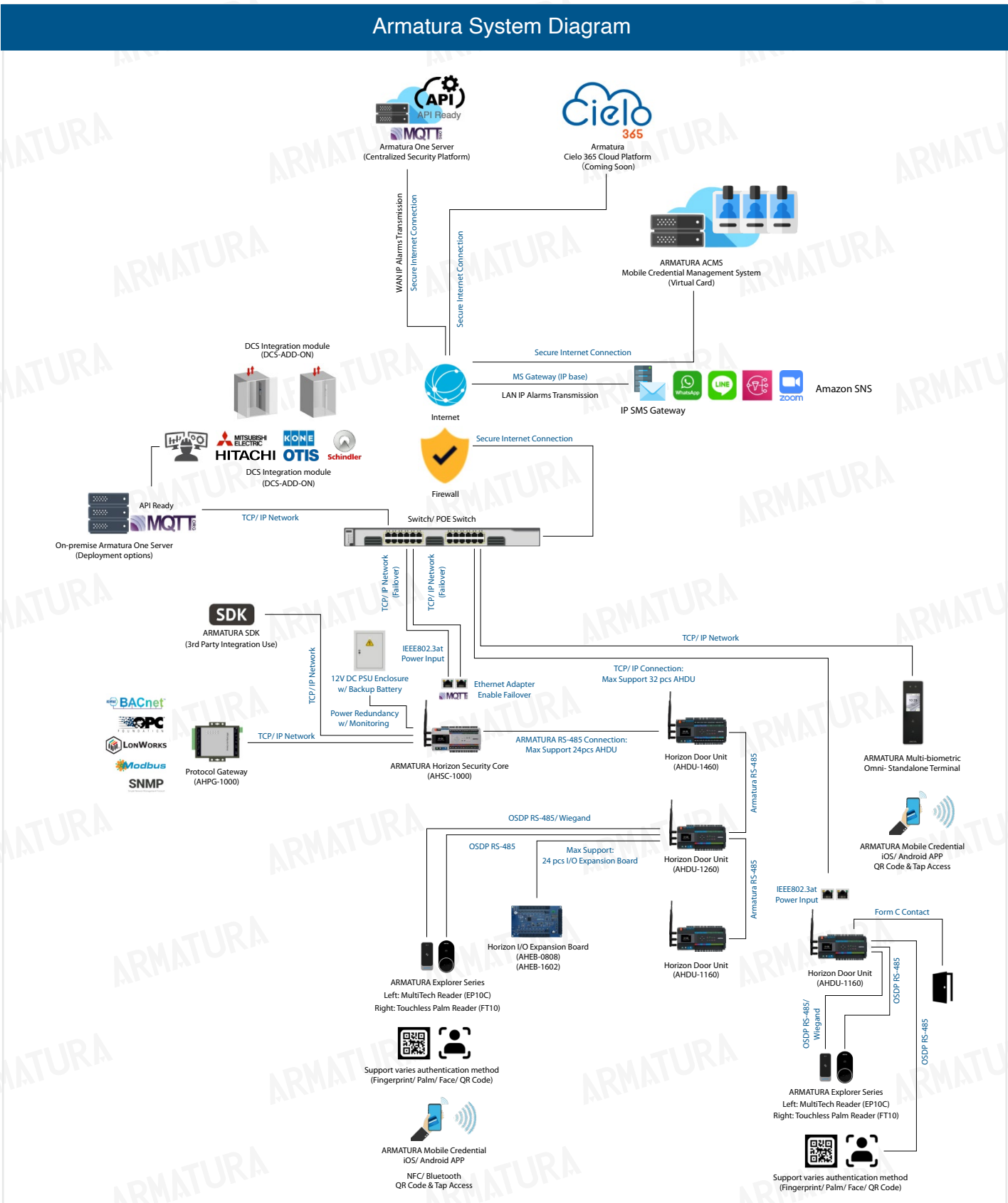
Cable Requirement		
	AHEB-0808	AHEB-1602
Power & Relays	12 - 24 VDC ± 20%, 550 mA maximum	
RS-485 Port	One twisted pair with drain wire and shield, 120 ohm resistance, 22-18 AWG, Maximum cable length: 3937ft (1200m)	

Mechanical		
	AHEB-0808	AHEB-1602
Dimensions	7.6" W x 4.6" L x 0.7" H (193 x 116 x 17.5mm)	
Weight	5.8oz (165.3g)	
Mounting	Wall Mount	

Environmental		
	AHEB-0808	AHEB-1602
Temperature	-4°F~131°F (-20°C~55°C) , Operating & Storage	
Humidity	0-95% RHNC	
Certification(s)	CE, FCC, RoHS, UL294	
Security Rating	Data Storage Encrypted with Certified EAL6+ Crypto Chipset	

Software Interface		
	AHEB-0808	AHEB-1602
Supported Software	Armatura One Security System, Cielo365 (coming soon)	

## Armatura System Diagram



# ARMATURA

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Address: 190 Bluegrass Valley Parkway, Alpharetta, GA 30005

Phone: + 1 (470) 816-1970

Email: [sales@armatura.us](mailto:sales@armatura.us)

Website: [www.armatura.us](http://www.armatura.us)

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