

Omni Series - Omni30

All Weather Outdoor Multi-tech Smart Standalone Terminal

- Multi-Biometric technology combining palm and face authentication
- IP66 water & dustproof protection rating
- Supports 125 kHz and 13.56 MHz frequency credentials
- Supports multiple mount types (Single gang/ European/ Asian box)



Modern Aesthetic Design



The build of the Omni30 blends a high quality metal enclosure with a tempered glass panel. The elegant design fits perfectly into any usage scenario and its sleek design brings a practical and reliable experience to users.



Industry-Leading Design and User Experience

The Omni30 provides an improved user experience with a 5" high resolution touchscreen and intuitive UI design. Using our advanced algorithms, users can get the best verification experience.

Palm authentication distance range: 7" - 15.7" (18cm - 40cm) Face authentication distance range: 15.7" - 47.2" (40cm - 120cm)



IP66 Water & Dustproof Protection Rating

Certified IP66 water & dustproof levels represent that the readers can withstand dust, dirt, sand, and are resistant to violent surf impact or strong winds and rain.



Variable Input Voltage

The device is compatible with 12V input voltages.



Advanced Security

Secure communication: OSDP(V2.2) over RS485 communication between the OmniAC30 and access control panels. Using AES-128 encryption standards ensures the highest levels of data protection & security.



Outdoor Rated for Variable Environments

IP66 Weatherproof rating - built to withstand freezing cold winters, heavy rains and dry/hot summers.

-20°C to 60°C/ -4°F - 140°F operating temperature enables operation even under the most severe weather conditions.



Supports Multi-Card Types

Supports 125 kHz and 13.56 MHz frequency credentials. Supports various card types including EM, IC Card, HID Prox, HID iCLASS, DESFire and FeliCa.



Unrivaled Palm

and Face Authentication Performance

ARMATURA's Multi-Biometric technology combines palm and face authentication with our unique deep learning algorithm to give users an efficient authentication experience.

Industry-leading combination of visible and NIR infrared authentication technology provides exceptional authentication accuracy and the industry's top-notch anti-spoofing protection.



Multi-Factor Authentication Capability

Offering credential options of palm, face, physical cards and QR codes.

*IC Card, Desfire, HID Prox, iClass, SEOS, etc.

*Integrate advanced multiple biometric authentication methods such as palm and face.

*QR code scanning for visitors & employees.

*PIN code option.



Touchless Solution for New standards of the Post-pandemic World

The Omni30 meets the needs of the contactless world with features like remote user enrollment, palm, mask detection and face authentication for users with or without masks. Our Palm/ Face/ Card/ QR code authentication technology supports contactless authentication.



Video Intercom (Coming Soon)

The Omni30 supports video intercom function suitable for most visitor scenarios. Two-way audio streaming with echo and noise cancellation lets you easily communicate with visitors.



Installation Made Easy

Robust design & form factor makes this device easy to install. PoE option allows for minimal use of cabling and lowers the cost of installation. OmniAC30 supports multiple mount types (Single gang/ European/ Asian box) to meet most scenarios worldwide. Mounting accessories for speedgates are also available.



Better Images, Faster Authentication

This device supports palm/ face tracking, which can more intelligently capture the user's biometrics and avoid the user's biometric from continuing to be compared after verifying. At the same time, the palm/ face AE function enables the device to obtain higher quality images which improves the authentication accuracy.

Dimensions



General Information

Primary Power	12 VDC (3A min @12V)
POE	Supported
RS485 connection	Port 1: RS485 standard/ OSDP V2.1.7
CPU	1.2GHZ Quard Core ARM Processor
NPU	2.4TOPS NPU
Memory	8 GB Flash + 1 GB RAM
Camera	Face Automatic Exposure Palm Automatic Exposure Face tracking Palm tracking WDR HDR 50Hz to 60Hz Automatic Adaption Dual Camera CMOS 2MP (Output image 720P*1280P)
Primary Host Communication	Ethernet: 10/ 100 Mbps, auto MDI/ MDIX Complies with TLS 1.2 for end to end secure communication channel
Ethernet network connection	Port 1:10/ 100 Mbps, auto MDI/ MDIX
Data Protection	Complies with TLS 1.2 for end to end secure communication channel (Secured Communication between Standalone Terminal & Server) AES128 (Secured Communication between the Standalone Terminal & OSDP Readers & Access Control Panels)
Number of Ports	1*TCP/ IP 1*RS-485 Input: 4ch TTL Inputs Output: 1ch TTL Output 2 relays
Inputs	Wiegand in, Button, Sensor in, Aux Input
Outputs	2 relays with dry contacts, Wiegand Output, Lock, Alarm

Normally Open Contact Rating	5A @30Vdc resistive
Normally Closed Contact Rating	5A @30Vdc resistive
Tamper Switch	Magnetic tamper detection system
On-Board Monitor	Size: 5", Resolution: 1280*720, Touch Monitor, TFT
Audio Indicator	Internal speaker with adjustable intensity (Configurable on UI)
MIC	Supported
Video Phone	Supported
User Capacity	50,000
RFID Card Capacity	50,000 (1:N) / 50,000 (1:1)
Maximum RFID Card Number Length	Wiegand In & Out (up to 64 bits)
Face Capacity	10,000 (1:N)/ 50,000 (1:1)
Palm Capacity	5,000 (1:N)/ 20,000 (1:1)
RFID Reading Distance	13.56MHz & 125kHz: Up to 1.96"/ 50 mm (depending on environment and transponder)
Face authentication Distance	Dual Camera Liveness Detection On: 15.7" - 55.1" (40cm - 140cm) Single Camera Liveness Detection On: 15.7" - 78.7" (40cm - 200cm)
Palm authentication Distance and Angle Tolerance	7" - 15.7" (18cm - 40cm) / Pitch +/-35, Yaw +/- 60, Roll +/-35, Blend +/-30
Face authentication Speed	100ms (Field Test Result)
Live Face Detection (Anti-Spoofing)	Support
Recommend Installation Height:	Recommend Installation Height: 55" (140cm) (Using the plate with tilt angle) 59" (150cm) (Plate with horizontal angle)
Palm authentication Speed	140ms (Field Test Result)
Transaction Buffer	Records: 1,000,000
Access group	99
On-Board Access Point Control	1 access point on board
On-Board Reader Support	1(OSDP over RS485) or 1 (Wiegand Input)
Protection / Resistance	Weather & Dust Proof Protection Rating compliant with IP66

RFID / Biometrics Reader Interface

Input Voltage	12 VDC (3A min @ 12V) (Equal to primary power input)
Maximum Input Current	12 VDC (3A min @ 12V) (Equal to primary power input)
RS-485 Protocol	OSDP 2.1.7 Secure Channel, AES-128
OSDP Mode	9600-115200 bps, OSDP V2.1.7, asynchronous, half-duplex, 1 start bit, 8 data bits, and 1 stop bit.
Wiegand	Wiegand In & Out (Up to 64 bits)
Data Inputs	TCP/IP, RS485, OSDP and Wiegand standards supported. Maximum RS485/ OSDP cable length: 500ft (152m) Maximum Wiegand cable length: 328ft (100m)

Cable Requirement

Power & Relays	One twisted pair, 18 to 16 AWG
Ethernet	CAT-5, minimum 330 ft. (100m)
RS-485 Reader Port	9600-115200 bps, asynchronous, half-duplex, 1 start bit, 8 data bits, and 1 stop bit. One twisted pair with drain wire and shield, 120 ohm impedance, 22-18 AWG, Maximum cable length: 3937ft (1200m)
Wiegand Port	20 AWG shielded, 328ft. (100m)

Mechanical

Dimensions	3.82" W x 1.112" D x 8.23" H (97 x 28.5 x 209mm)
Weight	835g
Mounting	Suited for mullion-mount door installations or any flat surface mounting Supports mounting plate installation (Single gang/ European/ Asian box) Supports rots-02 bracket
Housing Material	Aluminium alloy + Tempered glass

Environmental

Operating & Storage Temperature	-4°F ~ 140°F (-20°C ~ 60°C)
Operating Humidity	10 - 90%RH (Non-condensing)
Certification(s)	CE, FCC, RoHS, UL (coming soon)

Software Interface

TCP/IP Mode	Ethernet: 10 - 100Base-TX
TCP/IP Protocol	VLAN, SSH, HTTP, IPv4, DNS
TCP/IP Encryption	Complied up to TLS1.2 end to end secure communication channel
TCP/IP Communication	Push Protocol over HTTP, HTTPS and BEST Protocol over websocket
Supported Software	Armatura One Security System, Cielo365