Explorer Series - EP10C

All Weather Outdoor Multi-tech Smart Reader

- Advanced Cybersecurity Design
- Supporting 100+ RFID types

Bluetooth™ OSDP™ NFC

Compact Mullion RFID Reader

The EP10C mullion reader series is one of the most compact multi-tech RFID readers in the market, which supports over 100 RFID card types and both mobile NFC and Bluetooth (Low Energy) and is suited for mullion-mount door installations or any flat surface mounting. Optional Asian / European / Single-gang box spacing are available for all kinds of installation environments.

Access with Smartphone

Supports over 100 RFID card types in standard package with varies optional RFID modules that cover up to over 10 extra advanced secured RFID protocols, which almost cover most of the end-user requests, enabling high flexibility for multi-card types and mobile credentials situation.

Advanced Cybersecurity Design

Secure communication: OSDP (version 2.1.7 secured communication) over RS485 communication between EP10C reader and control panel, complied with AES-128 standard against interleaving and replay attacks. Complied AES256 encryption standard between mobile (NFC / Bluetooth) and reader communication.

Secured Data Storage: Certified EAL5+ encryption chips to enhance data protection performance to the finical grading security level.

IP68 Water & Dustproof Protection Level

Certified IP68 Water & Dustproof levels represent that the readers can withstand dust, dirt and sand, and are resistant to submersion up to a maximum depth of 1.5m underwater for up to thirty minutes.

IK10 Physical & Environmental Protection

Certified IK10 Vandal-proof rating enables protection against up to 20 Joules attack for multiple times.

Anti-SPA/ DPA/ EMA/ DEMA Attack

Effectively prevents external malicious attacks and protect all communication and client's data.

Safety Standard of UL746C (F1) and Housing Material Meets UL94-V0 Standard

Able to work at both indoor and outdoor in corrosive environments and is resistant to UV degradation. Besides, burning stops on product surface within 10 seconds as it is not inflamed.

Industrial Grade Security Level

To ensure the Explorer Series, security reaches the new height in the industry, the Armatura design team has dedicated to work on the security upgrade in all perspectives.

Explorer Series supports 2 mobile identification modes with Armatura mobile Application “Armatura ID”.

Card Mode

Swipe smartphone over card reader like an RFID card for access.

Remote Mode

Open doors remotely by clicking a virtual button in the mobile App

Key Features

Mobile Credential Capability

Enables Armatura ID mobile Application, offering consistent user experience across different OS including iOS & Android. Opening doors by simply swiping smartphone over card reader simultaneously Secured by biometric functions offered by users' smartphones. Supports both NFC and Bluetooth communication methods, extending mobile access functions to almost all smartphone users.

iOS & Android

Compact Mullion Mount Design with Optional Gang Box

Mullion mount design suits most architectural and interior designs. Optional gang box covers exceptional installation environment.

Enhanced Cybersecurity

Open Supervised Device Protocol (OSDP) secured communication between control panel and reader. Advanced Data protection with certified crypto chip with EAL5+ standard. AES128 end-to-end encryption between control panel and reader, ensuring all communications are under protection.

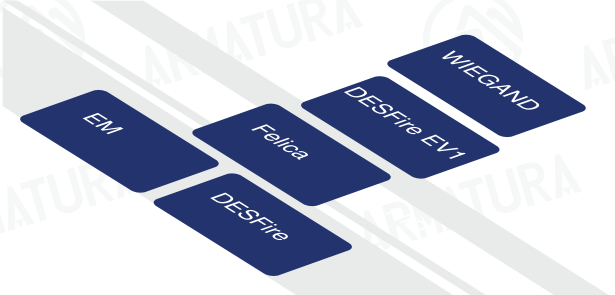
OSDP™

Ultimate Robustness (IP68 & IK10 & UL94-V0)

IK10 Vandal-proof and IP68 Water & Dustproof protection levels enable operation under any installation environment. IK10 vandal-proof protection level enhances protection ability against malicious physical attacks. -30°C to 70°C / -22°F - 158°F operating temperature enable operation under extreme weather conditions. UL94-V0 stops burning within 10 seconds as it is not inflamed.

Supports Multi-tech Reading

Supports 125 kHz, 13.56 MHz and 2.4GHz frequency card. Supports 100+ card types, covering most of the common card formats in the market.



Dimensions of Standard and Gang box Cover

Standard Cover

Gangbox Cover

Specification

Internal Number	EP10C
Operating Frequency / Standards	125 kHz 13.56 MHz: ISO14443A types A & B, ISO15693 2.4 GHz Bluetooth®
Functions	Read only: CSN*
Communications & Panel Connection	Wiegand (Up to 128bits SCP Secure Communication) RS485 (OSDP V2.1.7) Via Pigtail
Reading Distance	13.56MHz & 125kHz: Up to 2.3"/60 mm (depending on environment and transponder) Up to 393.7"/ 10m with a Bluetooth Smartphone (configurable distances on each reader)
Data Protection	AES128 (Secured Communication between Reader & Controller) Secure Data Storage in EAL 5+ Certified Crypto Chip
Visual Indicator	RGB LEDs (Configurable By 'Armatura Connect' Mobile APP)
Audio Indicator	Internal buzzer with adjustable intensity (Configurable By 'Armatura Connect' Mobile APP)
Power Requirement / Power Supply	9 VDC to 24 VDC
Operating Temperature	-30°C to 70°C / -22°F - 158°F
Dimensions (width x length x depth)	Standard Cover: 4.52" * 1.89" * 0.97" (H*W*D) / 114.8 mm * 48.0 mm * 24.7 mm (H*W*D) Gangbox Cover: 4.84" * 3.00" * 0.97" (H*W*D) / 123.0 mm * 76.2 mm * 24.7 mm (H*W*D)
Tamper Switch	Magnetic tamper detection system
Certifications	CE, FCC, RoHs3.0, WEEE
Mounting	Suited for mullion-mount door installations or any flat surface mounting Optional Asian / European / single-gang-box back-box spacing
Protection / Resistance	Certified with UL294 Outdoor and Indoor rating Weather & Dust Proof Protection Rating compliant with IP68 Reinforced Vandal-proof Structure IK10 certified
UV Stability	Nil structural degradation for the life of the reader in 3 years
Housing Material	Polycarbonate UL94-V0 & UL746C (F1)

Supported ARMATURA RFID Card Modules				
Frequency	Classification	Card Module Abbreviation	LF	HF
		Compatible Readers	EP10C	EP10C
13.56MHz	ISO14443A	LEGIC Advant		✓
		MIFARE Classic, MiniS50,S70,S50		✓
		MIFARE Classic EV1		✓
		MIFARE DESFire Light		✓
		MIFARE DESFire EV1		✓
		MIFARE DESFire EV2		✓
		MIFARE Plus S. X MIFARE Pro X		✓
		MIFARE Smart MX		✓
		MIFARE Ultralight		✓
		MIFARE Ultralight C		✓
		MIFARE Ultralight EV1		✓
		NTAG2XX		✓
		PayPass		✓
		SLE44R35		✓
		SLE66Rxx (my-d move)		✓
		ISO144438		✓
		Topaz		✓
	ISO144438	HID iCLASS SEOS		✓
		NFC		✓
		Calypso		✓
		Calypso Innovatron protocol		✓
		CEPAS		✓
		HID iCLASS		✓
		CTS		✓
		Moneo		✓
		Pico Pass		✓
	ISO18092/ ECMA-340	SRI4K, SRIX4K		✓
	ISO15693	SRI512, SRT512		✓
		Sony FeliCa		✓
		ISO 15693		✓
		EM4x33		✓
		EM4x35		✓
		HID iCLASS		✓
		HID ICLASS SE/SR/ Elite		✓
		iCODE SU		✓
		LEGIC Advant		✓
		M24LR16/64		✓
		MB89R118/119		MT2, MT3, Nano, Palon, Wall, Panel
		SRF55Vxx (my-d vicinity)		✓
		Tag-it		✓
		Pico Pass		✓
		LEGIC Prime		
		CPU Card		

Frequency	Classification	Card Module Abbreviation	LHF	LF	HF
125kHz		Compatible Readers	EP10C	EP10C	EP10C
		AWID	✓	✓	
		Cardax	✓	✓	
		CASI-RUSCO	✓	✓	
		Cotag	✓	✓	
		Deister	✓	✓	
		EM4100, 4102, 4200	✓	✓	
		EM4050, 4150, 4450, 4550	✓	✓	
		EM4305	✓	✓	
		FDX-B, EM4105	✓	✓	
		Ultra Prox	✓	✓	
		G-Prox	✓	✓	
		HID DuoProx II (1336)	✓	✓	
		HID ISO Prox II (1386)	✓	✓	
		HID Micro Prox II (1391)	✓	✓	
		HID Prox III (1346)	✓	✓	
		HID Prox	✓	✓	
		HID Prox II (1326)	✓	✓	
		HITAG 1, 2, S	✓	✓	
		ICT	✓	✓	
		IDTECK	✓	✓	
		Indaia	✓	✓	
		ISONAS	✓	✓	
		Keri	✓	✓	
		Miro	✓	✓	
		Nedap	✓	✓	
		Nexwatch	✓	✓	
		PAC	✓	✓	
		Pyramid	✓	✓	
		Q5	✓	✓	
		T5557, T5567, T5577	✓	✓	
		TITAN (EM4050)	✓	✓	
		UNIQUE	✓	✓	
		ZODIAC	✓	✓	

All information regarding the card formats supported by the RFID card modules are claimed by the provider(s) of the card modules. Armatura LLC accepts no liability.

The final interpretation of this data sheet belongs to Armatura LLC.