

Explorer Series-EP20ENC

Intelligent Multi-tech Enroller

- Designed for Advanced Security
- Supports Over 100 RFID Credential Types



Multi-tech RFID

Supports over 100 RFID card types in standard package with various 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.



Designed for Advanced Security

Complies with AES128 encryption standards between PC (USB2.0) and reader communication. Secured Data Storage: Certified EAL6+ encryption chips to enhance data protection performance to the final grading security level.



Advanced Security

The Armatura design team is dedicated to ensuring the Explorer Series reaches the highest security expectations.



Housing Material Meets UL94-V0 Standard

Ability to work in both indoor & outdoor environments. Resistant to UV degradation. UL94V-0 standard ensures burning combustion is not sustained for more than 10 seconds after applying controlled flame.

Key Features

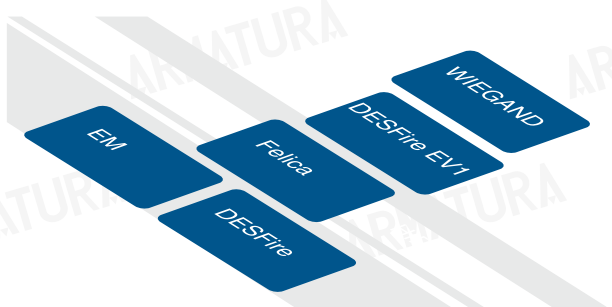
Enhanced Security

Advanced-Data protection using crypto chips with EAL6+ certified. AES128 end-to-end encryption between the Armatura One server and client side, ensuring all communications are secure.



Supports Multi-tech Reading

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



Ultimate Protection (UL94-V0)

UL94V-0 standards for flammability ensures burning combustion is not sustained for more than 10 seconds after applying a controlled flame.



Dimensions



Specifications

Internal Number	EP20ENC
Operating Frequency / Standards	125 kHz 13.56 MHz: ISO14443A types A & B, ISO15693
Functions	RFID Reading
Communications & PC Connection	OSDP (v2.2) via USB2.0 (Up to 128bits SCP Secure Communication)
Reading Distance	13.56MHz & 125kHz: Up to 5.1"/130 mm (depending on environment and transponder)
Data Protection	AES128 (Secured Communication between Reader & PC) Secure Data Storage in EAL 6+ Certified Crypto Chip
Visual Indicator	RGB LEDs
Audio Indicator	Internal buzzer
Power Requirement / Power Supply	5 VDC Power supply through the USB port - 1.5 m / 3.28 ft USB cable
Operating Temperature	-40°F - 149°F / -40°C to 65°C
Dimensions	3.52" W x 4.23" H x 0.90" D (89.5 x 107.5 x 23mm)
Certifications	CE, FCC, RoHs3.0, WEEE (Coming Soon), UL294 (Coming Soon)
Mounting	Desktop
UV Stability	Nil structural degradation for the life of the reader in 3 years
Housing Material	Polycarbonate UL94-V0 & UL746C (F1) Housing
Compatible Operating Systems	Windows® 7, Windows® 10 & Windows® 11

Frequency	Classification	Card Module Abbreviation Compatible Readers	[DF]	[SFMH]	[NO]	[NP]	[NI]	[NPL]	[NIH]	[RNP]	[RNI]	
			EP10C/ EP20C/ EP20CK/ EP20CQ/ EP20CKQ/ EP20ENC/ EP30 Series	EP10C/ EP20C/ EP20CK/ EP20CQ/ EP20CKQ/ EP20ENC/ EP30 Series/ VG10CKQ*	EP10C/ EP20ENC	EP10C/ EP20ENC	EP10C/EP20CQ/ EP20CKQ/ EP20ENC	EP10C	EP10C	OmniAC20/ OmniAC30/ EP20CQ*/ EP20CKQ*/ VG10CKQ*	OmniAC20/ OmniAC30/ EP20CQ*/ EP20CKQ*/ VG10CKQ*	
13.56MHz	ISO14443A	LEGIC Advant		√	√1)	√1)	√1)		√1)			
		MIFARE Classic, Mini S50,S70	√4)	√	√	√	√		√	√4)	√4)	
		MIFARE Classic EV1	√4)	√2)	√2)	√2)	√2)	√2)		√2)	√4)	√4)
		MIFARE DESFire Light		√8)	√8)	√8)	√8)	√8)		√8)	√4)	√4)
		MIFARE DESFire EV1	√4)	√	√	√	√	√		√	√4)	√4)
		MIFARE DESFire EV2/ EV3	√4)	√13)	√13)	√13)	√13)	√13)		√13)	√4)	√4)
		MIFARE Plus S, X		√	√	√	√	√		√	√4)	√4)
		MIFARE Smart MX		√3)	√3)	√3)	√3)	√3)		√3)	√4)	√4)
		MIFARE Ultralight		√	√	√	√	√		√	√4)	√4)
		MIFARE Ultralight C		√	√	√	√	√		√	√4)	√4)
		MIFARE Ultralight EV1		√2)	√2)	√2)	√2)	√2)		√2)	√4)	√4)
		NFC (NTAG2xx)	√		√	√	√	√		√		
		SLE44R35		√3)	√3)	√3)	√3)	√3)		√3)		
		SLE66Rxx (my-d move)		√3)	√3)	√3)	√3)	√3)		√3)		
		Topaz			√	√	√	√		√		
	HID iCLASS SEOS						√20)		√20)		√20)	
	NFC(HCE & NTAG2xx)		√	√	√	√	√		√			
	ISO14443B	Calypso		√3)	√3)	√3)	√3)	√3)		√3)		
		Calypso Innovatron protocol		√3)	√3)	√3)	√3)	√3)		√3)		
		CEPAS		√3)	√3)	√3)	√3)	√3)		√3)		
		CTS			√	√	√	√		√10)		
		Pico Pass		√1)	√4)	√4)	√4)	√4)		√4)		
		SRI4K, SRIX4K		√	√	√	√	√		√		
	ISO18092/ ECMA-340	SRI512, SRT512			√	√	√	√		√		
		Sony FeliCa			√5)	√5)	√5)	√5)		√5)	√1)	√1)
	ISO15693	EM4x33			√3)	√3)	√3)	√3)		√3)		
		EM4x35			√3)	√3)	√3)	√3)		√3)		
		HID iCLASS			√1)	√1)	√1)	√10)		√10)	√1)	√10)
		HID iCLASS SE/ SR/ Elite			√1)	√1)	√1)	√10)		√10)	√1)	√10)
		iCODE SLI			√	√	√	√		√		
LEGIC Advant				√1)	√1)	√1)	√1)		√1)			
M24LR16/64				√	√	√	√		√			
MB89R118/119					√	√	√		√			
SRF55Vxx (my-d vicinity)				√3)	√3)	√3)	√3)		√3)			
Tag-it				√	√	√	√		√			
Pico Pass				√1)	√4)	√4)	√4)		√4)			
LEGIC Prime				√								
CPU Card												

*To be released

ARMATURA

ARMATURA RFID Card Module Supporting List

ArmaSec-13112023

		Card Module Abbreviation	[DF]	[SFMH]	[NO]	[NP]	[NI]	[NPL]	[NIH]	[RNP]	[RNI]	
Frequency	Classification	Compatible Readers	EP10C/ EP20C/ EP20CK/ EP20CQ/ EP20CKQ/ EP20ENC/ EP30 Series	EP10C/ EP20C/ EP20CK/ EP20CQ/ EP20CKQ/ EP20ENC/ EP30 Series/ VG10CKQ*	EP10C/ EP20ENC	EP10C/ EP20ENC	EP10C/EP20CQ/ EP20CKQ/ EP20ENC	EP10C	EP10C	OmniAC20/ OmniAC30/ EP20CQ*/ EP20CKQ*/ VG10CKQ*	OmniAC20/ OmniAC30/ EP20CQ*/ EP20CKQ*/ VG10CKQ*	
125kHz		AWID			√	√	√	√				
		Cardax			√	√	√	√				
		CASI-RUSCO			√6)	√6)	√6)	√6)	√6)		√	√
		Deister			√6)	√6)	√6)	√6)	√6)			
		EM4100, 4102, 4200		√		√7)	√7)	√7)	√7)		√	√
		EM4050, 4150, 4450, 4550				√	√	√	√			
		EM4305				√	√	√	√			
		Ultra Prox				√	√	√	√			
		G-Prox					√6)	√6)	√6)	√6)		
		HID DuoProx II (1336)					√	√	√	√	√1)	√1)
		HID ISO Prox II (1386)					√	√	√	√	√1)	√1)
		HID Micro Prox II (1391)					√	√	√	√	√1)	√1)
		HID Prox III (1346)					√	√	√	√	√1)	√1)
		HID Prox					√	√	√	√	√1)	√1)
		HID Prox II (1326)					√	√	√	√	√1)	√1)
		HITAG 1, 2, S				√9)	√9)	√9)	√9)	√9)		
		ICT				√8)	√8)	√8)	√8)	√8)		
		IDTECK				√	√	√	√	√		
		Indala					√	√	√	√		
		ioProx					√	√	√	√		
		ISONAS				√	√	√	√	√		
		Keri				√	√	√	√	√		
		Miro				√	√	√	√	√		
		Nedap				√6)	√6)	√6)	√6)	√6)		
		Nexwatch					√	√	√	√		
		Pyramid				√	√	√	√	√		
		Q5				√	√	√	√	√		
T5557, T5567, T5577				√	√	√	√	√				
TITAN (EM4050)				√	√	√	√	√				
UNIQUE				√	√	√	√	√				
ZODIAC				√	√	√	√	√				
		Globally Available		Y				Y	Y	Y	Y	
	Availability	Globally Available Except for U.S., E.U., Japan, Australia, Canada, U.K., Albania, Iceland, Liechtenstein, Monaco, North Macedonia, Norway, San Marino, Serbia, Switzerland, Turkey, and the United Kingdom	Y		Y	Y	Y					

- √) UID only, customization upon request for reading encryption content
- 1) UID only
- 2) Read/ write (customisation) enhanced security features on request
- 3) Read/ write (customisation) in direct chip command mode
- 4) UID only, read/ write (customisation) on request
- 5) UID + read/ write (customisation) public area

- 6) Hash value only
- 7) Only emulation of 4100, 4102
- 8) On request
- 9) Without encryption
- 10) UID + PAC (CSN & Facility Code), read/ write(customisation) on request
- 11) In preparation

- 13) EV2/ EV3 supported as part of the EV1 downward compatibility
- 14) From FW V4.05
- 15) 134.2 kHz only
- 20) PAC (CSN & Facility Code), read/ write (customisation) on request

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

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.

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