ARMATURA

Explorer Series-EP20ENC

Intelligent Multi-tech Enroller

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

USB

Multi-tech RFID

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.

Advanced Security

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

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 finical grading security level.
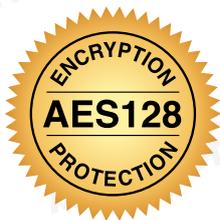
Housing Material Meets UL94-V0 Standard

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.
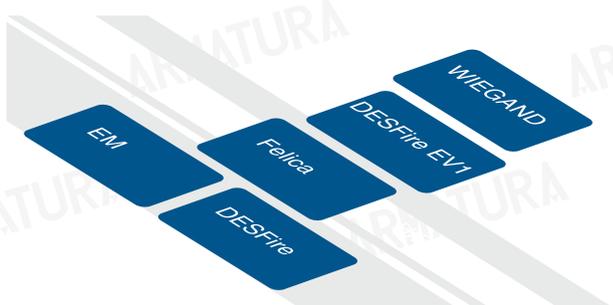
Key Features

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.

ENCRYPTION PROTECTION AES128

CERTIFIED CC EAL6+ CERTIFIED

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.

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.

EM

Felica

DESFire

DESFire EV1

WIEGAND

UL94-V0
Flame-Retardancy
Level

ARMATURA

Dimensions

3.54"/ 90mm

4.13"/ 105mm

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] EP10C/ EP20C/ EP20CK/ EP20CQ/ EP20CKQ/ EP30CF	[MDF] VG10CKQ-A/ VG10CKQ-P/ Griffin20	[SFMH] EP10C/ EP20C/ EP20CK/ EP20CQ/ EP20CKQ/ EP20ENC / EP30CF	[SFM] VG10CKQ/ VG10CKQ-P/ EP20ENC(Coming Soon)	[NO] EP20ENC	[NI] EP20ENC/ EP20CQ/ EP20CKQ/ EP30CF	[RNP] VG10CKQ/ VG10CKQ-P/ EP20CQ/ EP20CKQ/ EP30CF	[RNI] VG10CKQ/ VG10CKQ-P/ EP20CQ/ EP20CKQ/ EP30CF/ Griffin20	[RNPB] OmniAC20/ OmniAC30/ FT10CMQ	[RNIB] OmniAC20/ OmniAC30/ FT10CMQ	[RNOB] OmniAC20/ OmniAC30/ FT10CMQ
13.56MHz	ISO14443A	LEGIC Advant			√22)	√22)	√1)	√1)	√1)	√1)	√1)	√1)	√1)
		MIFARE Classic, Mini S50,S70,S50	√1)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)
		MIFARE Classic EV1	√1)	√1)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)
		MIFARE DESFire Light		√1)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)
		MIFARE DESFire EV1	√1)	√1)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)
		MIFARE DESFire EV2/ EV3	√1)	√1)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)
		MIFARE Plus S, X			√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)
		MIFARE Pro X					√4)	√4)	√4)	√4)	√4)	√4)	√4)
		MIFARE Smart MX			√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)
		MIFARE Ultralight		√1)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)
		MIFARE Ultralight C		√1)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)
		MIFARE Ultralight EV1		√1)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)	√4)
		NFC (NTAG2xx)					√1)	√1)	√4)	√4)	√4)	√4)	√4)
		PayPass			√1)	√1)	√4)	√4)					
		SLE44R35			√1)	√1)	√4)	√4)					
		SLE66Rxx (my-d move)			√1)	√1)	√4)	√4)					
		Topaz			√1)	√1)	√4)	√4)					
		HID iCLASS SEOS						√20)		√20)		√20)	
		NFC(HCE Mode,works with Armatura ID)			√	√	√	√	√	√	√	√	√
	ISO14443B	Calypso			√1)	√1)	√4)	√4)					
		Calypso Innovatron protocol			√1)	√1)	√4)	√4)					
		CEPAS		√21)	√21)	√21)	√21)	√21)	√4)	√4)	√4)	√4)	√4)
		HID iCLASS			√1)	√1)	√1)	√20)					
		CTS			√	√	√	√					
		Moneo			√3)	√3)	√3)	√3)					
		Pico Pass			√4)	√4)	√4)	√4)					
		SRI4K, SRIX4K			√	√	√	√					
		SRI512, SRT512			√	√	√	√					
	ISO18092/ ECMA-340	Sony FeliCa	√1)		√5)	√5)	√5)	√5)	√1)	√1)	√1)	√1)	√1)
	ISO15693	EM4x33			√3)	√3)	√3)	√3)					
		EM4x35			√3)	√3)	√3)	√3)					
		HID iCLASS			√1)	√1)	√1)	√10)	√1)	√10)	√1)	√10)	√1)
		HID iCLASS SE/ SR/ Elite			√1)	√1)	√1)	√10)	√1)	√10)	√1)	√10)	√1)
		iCODE SLI			√	√	√	√					
		LEGIC Advant			√22)	√22)	√1)	√1)					
		M24LR16/64					√	√					
		MB89R118/119					√	√					
		SRF55Vxx (my-d vicinity)			√3)	√3)	√3)	√3)					
		Tag-it			√	√	√	√					
		Pico Pass					√4)	√4)					
		LEGIC Prime			√22)	√22)							
		CPU Card											

ARMATURA RFID Card Module Supporting List

Frequency	Classification	Card Module Abbreviation	[DF]	[MDF]	[SFMH]	[SFM]	[NO]	[NI]	[RNP]	[RNI]	[RNPB]	[RNIB]	[RNOB]
		Compatible Readers	EP10C/ EP20C/ EP20CK/ EP20CQ/ EP20CKQ/ EP30CF	VG10CKQ-A/ VG10CKQ-P/ Griffin20	EP10C/ EP20C/ EP20CK/ EP20CQ/ EP20CKQ/ EP20ENC / EP30CF	VG10CKQ/ VG10CKQ-P/ EP20ENC(Coming Soon)	EP20ENC	EP20ENC/ EP20CQ/ EP20CKQ/ EP30CF	VG10CKQ/ VG10CKQ-P/ EP20CQ/ EP20CKQ/ EP30CF	VG10CKQ/ VG10CKQ-P/ EP20CQ/ EP20CKQ/ EP30CF/ Griffin20	OmniAC20/ OmniAC30/ FT10CMQ	OmniAC20/ OmniAC30/ FT10CMQ	OmniAC20/ OmniAC30/ FT10CMQ
125kHz		AWID					√	√					
		Cardax					√	√					
		CASI-RUSCO					√	√	√	√	√	√	√
		Cotag											
		Deister					√6)	√6)					
		EM4100, 4102, 4200	√1)	√1)		√1)	√7)	√7)	√	√	√	√	√
		EM4050, 4150, 4450, 4550					√	√					
		EM4305					√14)	√14)					
		FDX-B, EM4105					√15)	√15)					
		Ultra Prox					√15)	√15)					
		G-Prox						√6)					
		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					√9)	√9)					
		ICT					√8)	√8)					
		IDTECK					√	√					
		Indala											
		ioProx											
		ISONAS					√	√					
		Keri					√	√					
		Miro					√	√					
		Nedap					√6)	√6)					
		Nexwatch						√					
		PAC					√8)	√8)					
		Pyramid					√	√					
		Q5					√	√					
		T5557, T5567, T5577					√	√					
		TITAN (EM4050)					√	√					
		UNIQUE					√	√					
		ZODIAC					√	√					
BLE		Apple Wallet & Google Wallet									Y	Y	
	Availability	Globally Available	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Remark

√) 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
21) UID+CAN&CSN
22) UID only, read on request

*To be released

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