

## Explorer Series - EP30CF

### Multi-tech Fingerprint Reader

- OSDP & RS485 Biometric Reader
- Multi-tech RFID & Mobile credential
- Advanced Fingerprint Scanning Technology
- Designed For Advanced Security



### OSDP & RS485 Multi-tech Biometric Reader

The EP30CF reader series is one of the first OSDP multi-tech biometric readers in the market which fully complies with OSDP version 2.2 with secure communication encrypted using AES-128 standard. EP30CF supports an advanced fingerprint scanning algorithm and it supports biometric template transmission over RS485 and OSDP communication protocols. It also supports over 30 RFID card types as well as dual RFID frequencies (125kHz and 13.56MHz) and both mobile NFC and Bluetooth (Low Energy Credentials).



### Multi-tech & Mobile Credential Ready

The EP30CF supports over 30 different RFID card types as well as advanced fingerprint scanning and recognition. This reader is also able to support Bluetooth & NFC credentials for future-proofing your system.



### IP65 Water & Dustproof Protection Level

Certified IP65 Water & Dustproof levels represent that the readers can withstand dust, dirt and sand. IP65 Waterproof and Dustproof Level Standard.



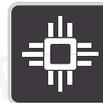
### Designed for Advanced Security

Secure communication: OSDP (version 2.2 secured communication) over RS485 communication between EP30CF reader and control panel. Complies with AES-128 standards to prevent against interleaving and replay attacks. Complies with AES-256 encryption standards between mobile (NFC / Bluetooth) and reader communication.



### Advanced Fingerprint Scanning Technology

Armatura's fingerprint scanning technology is one of the most advanced in the industry. It supports the system to store up to millions of fingerprint templates. The fingerprint is irreversible to fingerprint photos under any possible measures, and built-in anti-spoofing technology prevents fake fingerprints or images from being presented and authenticated. Additional security is provided with the AES-256 encryption standard.



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 ensure the Explorer Series reaches the highest security expectations.

### Anti-SPA/ DPA/ EMA/ DEMA Attack

Effectively prevents external malicious attacks protecting all communications & client's data.

Explorer Series supports 2 mobile identification modes with the Armatura mobile Application "Armatura ID".



#### Card Mode

Present your smartphone to the reader like an access card



#### Remote Mode

Verify on the reader by clicking a button in the Armatura ID app

## Key Features

### Mobile Credential Capability

The Armatura ID mobile app offers a consistent user experience across iOS & Android platforms. Opening doors by simply presenting your smartphone to the reader. Supports both NFC and Bluetooth communication methods, extending mobile access functions to almost all smartphone users.



iOS & Android

LEGIC

Bluetooth™

NFC

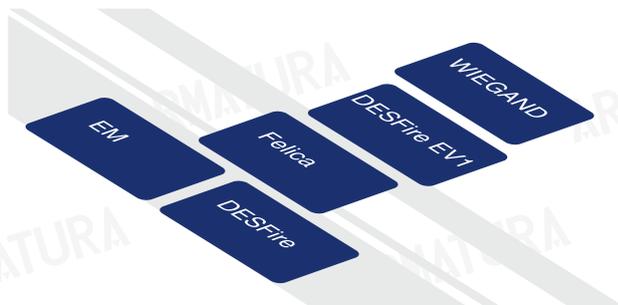
### Enhanced Cybersecurity

Open Supervised Device Protocol (OSDP) supports communication between control panel and reader. Guarantees advanced data protection using certified crypto chips with EAL6+ standards. Supports AES128 end-to-end encryption between control panel and reader, ensuring all communications are under secure.

OSDP™

### 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.



### IP65 Water & Dustproof Protection Level

Certified IP65 Water & Dustproof levels represent that the readers can withstand dust, dirt and sand.



## Dimensions



## Specification

Internal Number	EP30CF
Operating Frequency / Standards	125 kHz 13.56 MHz 2.4 GHz Bluetooth®
Functions	RFID, Bluetooth, Fingerprint
Communications & Panel Connection	OSDP (v2.2) via RS485
RFID 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 EAL6+ Certified Crypto Chip
Fingerprint Algorithm	AMTFingerprint v10.0
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 (Below 32°F, the reader needs separate power supply. Above 32°F, a single reader requires a minimum of 2.4W power. Below 0 degrees, a single reader requires a minimum of 8W power.)
Operating Temperature	-4°F - 131°F / -20°C to 55°C
Dimensions (L*H*D)	With Metal Case: 2.59" L x 5.28" H x 1.54" D (65.9 x 134.2 x 39.1mm) Without Metal Case: 2.57" L x 5.26" H x 1.54" D (65.2 x 133.7 x 39.1mm)
Tamper Switch	Magnetic tamper detection system
Certifications	CE, FCC, RoHs3.0, WEEE, BS EN 60839-Grade 4
Mounting	Flush Mount
Protection / Resistance	Weather & Dust Proof Protection Rating compliant with IP65

Frequency	Classification	Card Module Abbreviation	[DF]	[SFMH]	[NO]	[NP]	[NI]	[NOL]	[NPL]	[NOH]	[NIH]
		Compatible Readers	EP10C/ EP20C/ EP20CK/ EP20CQ/ EP20CKQ/ EP30 Series	EP10C/ EP20C/ EP20CK/ EP20CQ/ EP20CKQ/ EP30 Series	EP10C	EP10C/ EP20CQ/ EP20CKQ	EP10C/ EP20CQ/ EP20CKQ	EP10C	EP10C	EP10C	EP10C
13.56MHz	ISO14443A	LEGIC Advant		√	√1)	√1)	√1)			√1)	√1)
		MIFARE Classic, Mini S50,S70,S50	√4)	√	√	√	√			√	√
		MIFARE Classic EV1	√4)	√2)	√2)	√2)	√2)			√2)	√2)
		MIFARE DESFire Light		√11)	√11)	√11)	√11)			√11)	√11)
		MIFARE DESFire EV1	√4)	√	√	√	√			√	√
		MIFARE DESFire EV2	√4)	√11)	√11)	√11)	√11)			√11)	√11)
		MIFARE Plus S, X		√	√	√	√			√	√
		MIFARE Pro X			√3)	√3)	√3)			√3)	√3)
		MIFARE Smart MX		√3)	√3)	√3)	√3)			√3)	√3)
		MIFARE Ultralight		√	√	√	√			√	√
		MIFARE Ultralight C		√	√	√	√			√	√
		MIFARE Ultralight EV1		√2)	√2)	√2)	√2)			√2)	√2)
		NFC (NTAG2xx)	√		√	√	√			√	√
		PayPass		√3)	√3)	√3)	√3)			√3)	√3)
		SLE44R35		√3)	√3)	√3)	√3)			√3)	√3)
		SLE66Rxx (my-d move)		√3)	√3)	√3)	√3)			√3)	√3)
	Topaz			√	√	√			√	√	
	HID iCLASS SEOS						√20)				√20)
	NFC (HCE Mode,works with Armatura ID)		√	√	√	√			√	√	
	ISO14443B	Calypso		√3)	√3)	√3)	√3)			√3)	√3)
		Calypso Innovatron protocol		√3)	√3)	√3)	√3)			√3)	√3)
		CEPAS		√3)	√3)	√3)	√3)			√3)	√3)
		HID iCLASS		√1)	√1)	√1)	√10)			√1)	√10)
		CTS		√	√	√	√			√	√10)
		Moneo		√3)	√3)	√3)	√3)			√3)	√10)
		Pico Pass		√4)	√4)	√4)	√4)			√4)	√4)
		SRI4K, SRIX4K		√	√	√	√			√	√
	ISO18092	SRI512, SRT512		√	√	√	√			√	√
		Sony FeliCa		√5)	√5)	√5)	√5)			√5)	√5)
	ISO15693	EM4x33		√3)	√3)	√3)	√3)			√3)	√3)
		EM4x35		√3)	√3)	√3)	√3)			√3)	√3)
		HID iCLASS		√	√1)	√1)	√10)			√1)	√10)
		HID iCLASS SE/ SR/ Elite		√	√1)	√1)	√10)			√1)	√10)
iCODE SLI			√	√	√	√			√	√10)	
LEGIC Advant			√1)	√1)	√1)	√1)			√1)	√1)	
M24LR16/64				√	√	√			√	√	
MB89R118/119					MT2, MT3, Nano, Palon, Wall, Panel	MT2, MT3, Nano, Palon, Wall, Panel	MT2, MT3, Nano, Palon, Wall, Panel			MT2, MT3, Nano, Palon, Wall, Panel	MT2, MT3, Nano, Palon, Wall, Panel
SRF55Vxx (my-d vicinity)			√3)	√3)	√3)	√3)			√3)	√3)	
Tag-it			√	√	√	√			√	√	
Pico Pass				√4)	√4)	√4)			√4)	√4)	
LEGIC Prime		√									
CPU Card											

# ARMATURA

## ARMATURA RFID Card Module Supporting List

Frequency	Classification	Card Module Abbreviation	[DF]	[SFMH]	[NO]	[NP]	[NI]	[NOL]	[NPL]	[NOH]	[NIH]	
			Compatible Readers	EP10C/ EP20C/ EP20CK/ EP20CQ/ EP20CKQ/ EP30 Series	EP10C/ EP20C/ EP20CK/ EP20CQ/ EP20CKQ/ EP30 Series	EP10C	EP10C/ EP20CQ/ EP20CKQ	EP10C/ EP20CQ/ EP20CKQ	EP10C	EP10C	EP10C	EP10C
125kHz		AWID			√	√	√	√	√			
		Cardax			√	√	√	√	√			
		CASI-RUSCO			√	√	√	√	√			
		Cotag										
		Deister				√6)	√6)	√6)	√6)	√6)		
		EM4100, 4102, 4200		√		√7)	√7)	√7)	√7)	√7)		
		EM4050, 4150, 4450, 4550				√	√	√	√	√		
		EM4305				√14)	√14)	√14)	√14)	√14)		
		FDX-B, EM4105				√15)	√15)	√15)	√15)	√15)		
		Ultra Prox				√15)	√15)	√15)	√15)	√15)		
		G-Prox					√6)	√6)		√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)	√9)	√9)	√9)		
		ICT				√8)	√8)	√8)	√8)	√8)		
		IDTECK				√	√	√	√	√		
		Indaia										
		ioProx										
		ISONAS				√	√	√	√	√		
		Keri				√	√	√	√	√		
		Miro				√	√	√	√	√		
		Nedap				√6)	√6)	√6)	√6)	√6)		
		Nexwatch					√	√		√		
		PAC				√8)	√8)	√8)	√8)	√8)		
		Pyramid				√	√	√	√	√		
		Q5				√	√	√	√	√		
		T5557, T5567, T5577				√	√	√	√	√		
		TITAN (EM4050)				√	√	√	√	√		
UNIQUE				√	√	√	√	√				
ZODIAC				√	√	√	√	√				
		Globally Available		√			√	√		√		
	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	√		√	√	√					

- 1) UID only
- 2) Read /write enhanced security features on request
- 3) Read /write in direct chip command mode
- 4) UID only, read/write on request
- 5) UID + read /write 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 on request
- 11) In preparation

- 13) EV2/EV3 supported as part of the EV1 upward compatibility
- 14) From FW V4.05
- 20) PAC (CSN & Facility Code), read /write 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.

**\*To be released**

# ARMATURA

Address: 1600 Union Hill Rd., Alpharetta GA 30005

Phone: +1-650-4556863

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

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

Copyright © 2022 Armatura LLC @ ARMATURA, the ARMATURA logo, are trademarks of Armatura

