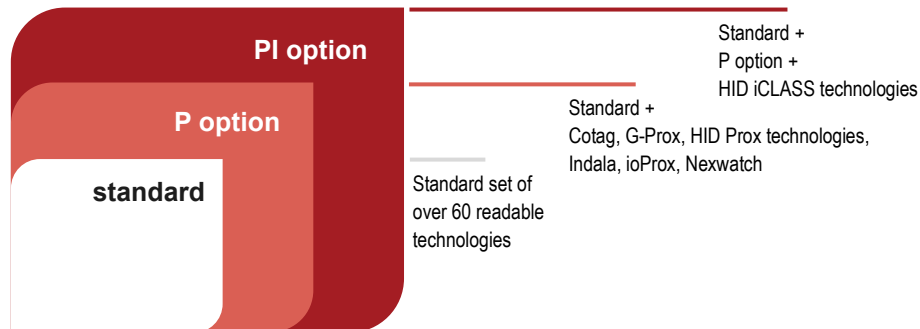


TRANSPONDER MATRIX

OVERVIEW OF TECHNOLOGIES SUPPORTED BY ELATEC RFID READERS AND MODULES



Unless otherwise agreed with ELATEC, each ELATEC reader/module is delivered with a standard firmware version that might be older than the latest firmware developed by ELATEC. The standard firmware version of an ELATEC reader/module can be changed using the ELATEC AppBlaster tool. Alternatively, you can also download or request a specific firmware version on the ELATEC website.

This transponder matrix gives an overview of all transponder technologies supported by ELATEC RFID readers and modules running with the firmware version 4.64.



ELATEC multi-frequency RFID readers/modules (LF/HF)

TWN4 MultiTech*, TWN4 MultiTech 2, TWN4 MultiTech 2 LF HF, TWN4 MultiTech 2 M, TWN4 MultiTech 2 M LF HF, TWN4 MultiTech 3 M, TWN4 MultiTech 3 M LF HF, TWN4 MultiTech M*, TWN4 MultiTech Nano M, TWN4 MultiTech SmartCard*, TWN4 Palon Compact M, TWN4 Palon Compact M Light, TWN4 Palon Compact Panel, TWN4 Palon Compact Panel Light, TWN4 Palon Square M LF HF, TWN4 Slim, TWN4 USB Front Reader

TWN4 MultiTech 2 LEGIC, TWN4 MultiTech 2 LEGIC LF HF, TWN4 MultiTech 2 LEGIC M, TWN4 MultiTech 2 LEGIC M LF HF, TWN4 MultiTech 3 LEGIC M, TWN4 MultiTech 3 LEGIC M LF HF, TWN4 MultiTech LEGIC*, TWN4 MultiTech LEGIC M*, TWN4 MultiTech Nano LEGIC 42 M, TWN4 MultiTech Nano LEGIC 63 M, TWN4 MultiTech SmartCard LEGIC 42*, TWN4 MultiTech SmartCard LEGIC M*, TWN4 Palon Compact LEGIC M, TWN4 Palon Compact LEGIC M Light, TWN4 Palon Compact LEGIC Panel, TWN4 Palon Compact LEGIC Panel Light, TWN4 Palon Compact LEGIC Wall, TWN4 Palon Compact LEGIC Wall Light, TWN4 Palon One LEGIC M LF HF*, TWN4 Slim LEGIC, TWN4 USB Front Reader LEGIC

	standard	P option	PI option ¹⁾	standard	P option	PI option ¹⁴⁾	
ISO 14443A	HID MIFARE Classic SE		•			•	
	HID MIFARE DESFire SE		•			•	
	HID SEOS		•			•	
	LEGIC Advant	UID only	UID only	UID only	•	•	
	NTAG2xx	•	•	•	•	•	
	NXP MIFARE Classic	•	•	•	•	•	
	NXP MIFARE Classic EV1	r/w enhanced security features on request	r/w enhanced security features on request	r/w enhanced security features on request	r/w enhanced security features on request	r/w enhanced security features on request	r/w enhanced security features on request
	NXP MIFARE DESFire EV1	•	•	•	•	•	
	NXP MIFARE DESFire EV2/EV3	Supported as part of the EV1 downward compatibility	Supported as part of the EV1 downward compatibility	Supported as part of the EV1 downward compatibility	Supported as part of the EV1 downward compatibility	Supported as part of the EV1 downward compatibility	Supported as part of the EV1 downward compatibility
	NXP MIFARE DESFire Light	On request	On request	On request	On request	On request	
	NXP MIFARE Mini	•	•	•	•	•	
	NXP MIFARE Plus S	•	•	•	•	•	
	NXP MIFARE Plus X	•	•	•	•	•	
	NXP MIFARE Smart MX	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode
	NXP MIFARE Ultralight	•	•	•	•	•	
	NXP MIFARE Ultralight C	•	•	•	•	•	
	NXP MIFARE Ultralight EV1	r/w enhanced security features on request	r/w enhanced security features on request	r/w enhanced security features on request	r/w enhanced security features on request	r/w enhanced security features on request	r/w enhanced security features on request
	SLE44R35	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode
	SLE66Rxx (my d-move)	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode
	Topaz	•	•	•	•	•	
ISO 14443B	Calypso	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	
	Calypso Innovatron protocol	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode		r/w in direct chip command mode	
	CEPAS	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	
	CTS	•	•	•		•	
	Pico Pass	UID only, r/w on request	UID only, r/w on request	UID only, r/w on request	UID only	UID only	
	SR14K	•	•	•		•	
	SR1512	•	•	•		•	
	SR1X4K	•	•	•		•	
	SRT512	•	•	•		•	
	EM4x33	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode
EM4x35	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	
ISO 15693	HID iCLASS Legacy/SR/SE		•			•	
	ICODE SLI	•	•	•	•	•	
	LEGIC Advant	UID only	UID only	UID only	•	•	
	M24LR16/64	•	•	•	•	•	
	MB89R118/119	2)	2)	2)	•	•	
	Pico Pass	UID only, r/w on request	UID only, r/w on request	UID only, r/w on request	UID only	UID only	
	SRF55Vxx (my d-vicinity)	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode	r/w in direct chip command mode
	Tag-it	•	•	•	•	•	
ISO 18092 / EPCMA-340	NFC Forum Tag type 1	•	•	•	•	•	
	NFC Forum Tag type 2	•	•	•	•	•	
	NFC Forum Tag type 3	•	•	•	•	•	
	NFC Forum Tag type 4	•	•	•	•	•	
	NFC Forum Tag type 5	•	•	•	•	•	
	Sony FeliCa	UID + r/w public area	UID + r/w public area	UID + r/w public area	UID + r/w public area	UID + r/w public area	UID + r/w public area
LEAF	AV2 only, requires one free SAM slot for MIFARE SAM AV2 card	AV2 only, requires one free SAM slot for MIFARE SAM AV2 card	AV2 only, requires one free SAM slot for MIFARE SAM AV2 card ³⁾	AV2 only, requires one free SAM slot for MIFARE SAM AV2 card	AV2 only, requires one free SAM slot for MIFARE SAM AV2 card	AV2 only, requires one free SAM slot for MIFARE SAM AV2 card ³⁾	
LEGIC Prime				•	•		

1) Requires one free SAM slot for HID iCLASS SE processor

2) Not supported by TWN4 MultiTech, TWN4 MultiTech SmartCard and TWN4 USB Front Reader series

3) Some ELATEC readers/modules have one free SAM slot only and cannot support LEAF and the PI option at the same time. Refer to the respective product data sheets for more information.

4) Only available with readers/modules of the TWN4 MultiTech 2 LEGIC product family

*EOL: These products have been discontinued. Please refer to the corresponding Product Discontinuation Notifications (PDN) at www.elatec-rfid.com/int/elatec-end-of-lifecycle-products for more information.

ELATEC multi-frequency RFID readers/modules (LF/HF)

TWN4 MultiTech*, TWN4 MultiTech 2, TWN4 MultiTech 2 LF HF, TWN4 MultiTech 2 M, TWN4 MultiTech 2 M LF HF, TWN4 MultiTech 3 M, TWN4 MultiTech 3 M LF HF, TWN4 MultiTech M*, TWN4 MultiTech Nano M, TWN4 MultiTech SmartCard*, TWN4 Palon Compact M, TWN4 Palon Compact M Light, TWN4 Palon Compact Panel, TWN4 Palon Compact Panel Light, TWN4 Slim, TWN4 Palon Square M LF HF, TWN4 USB Front Reader

TWN4 MultiTech 2 LEGIC, TWN4 MultiTech 2 LEGIC LF HF, TWN4 MultiTech 2 LEGIC M, TWN4 MultiTech 2 LEGIC M LF HF, TWN4 MultiTech 3 LEGIC M, TWN4 MultiTech 3 LEGIC M LF HF, TWN4 MultiTech LEGIC*, TWN4 MultiTech LEGIC M*, TWN4 MultiTech Nano LEGIC 42 M, TWN4 MultiTech Nano LEGIC 63 M, TWN4 MultiTech SmartCard LEGIC 42*, TWN4 MultiTech SmartCard LEGIC M*, TWN4 Palon Compact LEGIC M, TWN4 Palon Compact LEGIC M Light, TWN4 Palon Compact LEGIC Panel, TWN4 Palon Compact LEGIC Panel Light, TWN4 Palon Compact LEGIC Wall, TWN4 Palon Compact LEGIC Wall Light, TWN4 Palon One LEGIC M LF HF*, TWN4 Slim LEGIC, TWN4 USB Front Reader LEGIC

	standard	P option	PI option ¹⁾	standard	P option	PI option ¹⁾²⁾
AWID	•	•	•	•	•	•
Cardax	Hash value only	Hash value only	Hash value only	Hash value only	Hash value only	Hash value only
CASI-RUSCO	•	•	•	•	•	•
Deister	Hash value only	Hash value only	Hash value only	Hash value only	Hash value only	Hash value only
EM4050	•	•	•	•	•	•
EM4100	•	•	•	•	•	•
EM4102	•	•	•	•	•	•
EM4150	•	•	•	•	•	•
EM4200	only emulation of 4100/4102	only emulation of 4100/4102	only emulation of 4100/4102	only emulation of 4100/4102	only emulation of 4100/4102	only emulation of 4100/4102
EM4305	•	•	•	•	•	•
EM4450	•	•	•	•	•	•
EM4550	•	•	•	•	•	•
G-Prox		Hash value only	Hash value only		Hash value only	Hash value only
HID 1326 Prox II		•	•		•	•
HID 1336 DuoProx II		•	•		•	•
HID 1346 ProxKey III		•	•		•	•
HID 1386 ISO Prox II		•	•		•	•
HID 1391 Micro Prox		•	•		•	•
HID Prox		•	•		•	•
HITAG 1/2/S	Without encryption	Without encryption	Without encryption	Without encryption	Without encryption	Without encryption
ICT	On request	On request	On request	On request	On request	On request
IDTECK	•	•	•	•	•	•
Indala		•	•		•	•
ioProx		•	•		•	•
ISONAS	•	•	•	•	•	•
Keri	•	•	•	•	•	•
Miro	•	•	•	•	•	•
Nedap	Hash value only	Hash value only	Hash value only	Hash value only	Hash value only	Hash value only
Nexwatch		•	•		•	•
Pyramid	•	•	•	•	•	•
Q5	•	•	•	•	•	•
T5557	•	•	•	•	•	•
T5567	•	•	•	•	•	•
T5577	•	•	•	•	•	•
TITAN (EM4050)	•	•	•	•	•	•
UltraProx	•	•	•	•	•	•
UNIQUE	•	•	•	•	•	•
ZODIAC	•	•	•	•	•	•

125 kHz** (LF)

1) Requires one free SAM slot for HID iCLASS SE processor

2) Only available with readers/modules of the TWN4 MultiTech 2 LEGIC product family

*EOL: These products have been discontinued. Please refer to the corresponding Product Discontinuation Notifications (PDN) at www.elatec-rfid.com/int/elatec-end-of-lifecycle-products for more information.

**125 kHz technology requires a Russian local test and import license from the ministry of Trade and Industry (MINPROMTORC). This license has to be in place before ELATEC can accept any order to be shipped to Russia.

ELATEC single-frequency RFID readers/modules (HF)

		TWN4 MultiTech 2 HF, TWN4 MultiTech 2 HF PCSC, TWN4 MultiTech 2 M HF, TWN4 MultiTech HF MINI, TWN4 Slim JP	
		standard	I option ¹⁾
ISO 14443A	HID MIFARE Classic SE		•
	HID MIFARE DESFire SE		•
	HID SEOS		•
	LEGIC Advant	UID only	UID only
	NTAG2xx	•	•
	NXP MIFARE Classic	•	•
	NXP MIFARE Classic EV1	r/w enhanced security features on request	r/w enhanced security features on request
	NXP MIFARE DESFire EV1	•	•
	NXP MIFARE DESFire EV2/EV3	supported as part of the EV1 downward compatibility	supported as part of the EV1 downward compatibility
	NXP MIFARE DESFire Light	On request	On request
	NXP MIFARE Mini	•	•
	NXP MIFARE Plus S	•	•
	NXP MIFARE Plus X	•	•
	NXP MIFARE Smart MX	r/w in direct chip command mode	r/w in direct chip command mode
	NXP MIFARE Ultralight	•	•
	NXP MIFARE Ultralight C	•	•
	NXP MIFARE Ultralight EV1	r/w enhanced security features on request	r/w enhanced security features on request
	SLE44R35	r/w in direct chip command mode	r/w in direct chip command mode
	SLE66Rxx (my d-move)	r/w in direct chip command mode	r/w in direct chip command mode
	Topaz	•	•
ISO 14443B	Calypso	r/w in direct chip command mode	r/w in direct chip command mode
	Calypso Innovatron protocol	r/w in direct chip command mode	r/w in direct chip command mode
	CEPAS	r/w in direct chip command mode	r/w in direct chip command mode
	CTS	•	•
	Pico Pass	UID only, r/w on request	UID only, r/w on request
	SR14K	•	•
	SR1512	•	•
	SR1X4K	•	•
	SRT512	•	•
	ISO 15693	EM4x33	r/w in direct chip command mode
EM4x35		r/w in direct chip command mode	r/w in direct chip command mode
HID iCLASS Legacy/SR/SE			•
iCODE SLI		•	•
LEGIC Advant		UID only	UID only
M24LR16/64		•	•
MB89R118/119		2)	2)
Pico Pass		UID only, r/w on request	UID only, r/w on request
SRF55Vxx (my d-vicinity)	r/w in direct chip command mode	r/w in direct chip command mode	
ISO 18092 / ECMA-340	Tag-it	•	•
	NFC Forum Tag type 1	•	•
	NFC Forum Tag type 2	•	•
	NFC Forum Tag type 3	•	•
	NFC Forum Tag type 4	•	•
	NFC Forum Tag type 5	•	•
	Sony FeliCa	UID + read/write public area	UID + read/write public area
LEAF	AV2 only, requires one free SAM slot for MIFARE SAM AV2 card	AV2 only, requires one free SAM slot for MIFARE SAM AV2 card ³⁾	
LEGIC Prime			

1) Requires one free SAM slot for HID iCLASS SE processor

2) Supported, except by TWN4 MultiTech HF Mini

3) Some ELATEC readers/modules have one free SAM slot only and cannot support LEAF and the I option at the same time. Refer to the respective product data sheets for more information.

*EOL: These products have been discontinued. Please refer to the corresponding Product Discontinuation Notifications (PDN) at www.elatec-rfid.com/int/elatec-end-of-lifecycle-products for more information.

ELATEC single-frequency RFID readers/modules (LF)

		TWN4 MultiTech 2 LF*, TWN4 MultiTech 2 M LF*, TWN4 MultiTech 3 M LF*	
		standard	P option
125 kHz** (LF)	AWID	•	•
	Cardax	Hash value only	Hash value only
	CASH-RUSCO	•	•
	Deister	Hash value only	Hash value only
	EM4050	•	•
	EM4100	•	•
	EM4102	•	•
	EM4150	•	•
	EM4200	Only emulation of 4100/4102	Only emulation of 4100/4102
	EM4305	•	•
	EM4450	•	•
	EM4550	•	•
	G-Prox		Hash value only
	HID 1326 Prox II		•
	HID 1336 DuoProx II		•
	HID 1346 ProxKey III		•
	HID 1386 ISO Prox II		•
	HID 1391 Micro Prox		•
	HID Prox		•
	HITAG 1/2/S	Without encryption	Without encryption
	ICT	On request	On request
	IDTECK	•	•
	Indala		•
	ioProx		•
	ISONAS	•	•
	Keri	•	•
	Miro	•	•
	Nedap	Hash value only	Hash value only
	Nexwatch		•
	Pyramid	•	•
	Q5	•	•
	T5557	•	•
	T5567	•	•
T5577	•	•	
TITAN (EM4050)	•	•	
UltraProx	•	•	
UNIQUE	•	•	
ZODIAC	•	•	

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