

(((●))) RFID Elatec Systems		TWN4 MultiTech (125 kHz + 134.2 kHz + 13.56 MHz + NFC + Bluetooth Low Energy)					
Options →		Option Standard	Option P	Option PI	Option Standard	Option P	
with antenna →		MT LF+HF, SmartCard	MT LF+HF P, SmartCard P	MT LF+HF PI, Smart Card PI	MT LEGIC LF+HF	MT LEGIC LF+HF P	
		MT 2 BLE, MT 2 LF+HF	MT 2 BLE P, MT2 LF+HF P	MT 2 BLE PI, MT 2 LF+HF PI	SmartCard LEGIC	SmartCard LEGIC P	
		MT 3 BLE, MT 3 LF+HF USB Frontreader	MT 3 BLE P, MT 3 LF+HF USB Frontreader P	MT 3 BLE PI, MT 3 LF+HF USB Frontreader PI	USB Frontreader LEGIC	USB Frontreader LEGIC P	
		Palon PCB, Palon Wall, Palon Panel	Palon PCB P, Palon Wall P, Palon Panel P	Palon PCB PI, Palon Wall PI, Palon Panel PI			
without antenna →		Slim	Slim-P	Slim-PI			
		Core Nano	Core P Nano P	Core PI Nano PI	Core LEGIC Nano LEGIC	Core LEGIC P Nano LEGIC P	
13.56 MHz	ISO14443A	LEGIC Advant	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓	
		MIFARE Classic, Mini	✓	✓	✓	✓	
		MIFARE Classic EV1	✓ <sup>2)</sup>	✓ <sup>2)</sup>	✓ <sup>2)</sup>	✓ <sup>2)</sup>	
		MIFARE DESFire Light	✓ <sup>11)</sup>	✓ <sup>11)</sup>	✓ <sup>11)</sup>	✓ <sup>11)</sup>	
		MIFARE DESFire EV1	✓	✓	✓	✓	
		MIFARE DESFire EV2	✓ <sup>11)</sup>	✓ <sup>11)</sup>	✓ <sup>11)</sup>	✓ <sup>11)</sup>	
		MIFARE Plus S, X	✓	✓	✓	✓	
		MIFARE Pro X	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	
		MIFARE Smart MX	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	
		MIFARE Ultralight	✓	✓	✓	✓	
		MIFARE Ultralight C	✓	✓	✓	✓	
		MIFARE Ultralight EV1	✓ <sup>2)</sup>	✓ <sup>2)</sup>	✓ <sup>2)</sup>	✓ <sup>2)</sup>	
		NTAG2xx	✓	✓	✓	✓	
		PayPass	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	
		SLE44R35	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	
	SLE66Rxx (my-d move)	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>		
	Topaz	✓	✓	✓			
	ISO14443B	HID iCLASS SEOS	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>10)</sup>	✓ <sup>1)</sup>	✓ <sup>1)</sup>
		Calypso	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>
		Calypso Innovatron protocol	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>		
		CEPAS	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>
		HID iCLASS	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓	✓ <sup>1)</sup>	✓ <sup>1)</sup>
		CTS	✓	✓	✓		
		Moneo	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>
		Pico Pass	✓ <sup>4)</sup>	✓ <sup>4)</sup>	✓ <sup>4)</sup>	✓ <sup>1)</sup>	✓ <sup>1)</sup>
		SRI4K, SR1X4K	✓	✓	✓		
		SRI512, SRT512	✓	✓	✓		
	ISO18092/ ECMA-340	NFC Forum Tag Type 1-5	Type 1-5	Type 1-5	Type 1-5	Type 2-5	Type 2-5
		NFC Peer-to-Peer	✓	✓	✓		
		Sony FelICa	✓ <sup>5)</sup>	✓ <sup>5)</sup>	✓ <sup>5)</sup>	✓ <sup>5)</sup>	✓ <sup>5)</sup>
	ISO15693	EM4x33	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>
		EM4x35	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>
		HID iCLASS	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓	✓ <sup>1)</sup>	✓ <sup>1)</sup>
		HID iCLASS SE/SR/Elite	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓	✓ <sup>1)</sup>	✓ <sup>1)</sup>
		ICODE SLI	✓	✓	✓	✓	✓
		LEGIC Advant	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓	✓
		M24LR16/64	✓	✓	✓	✓	✓
		MB89R118/119	MT2, MT3, Nano, Palon, Wall, Panel, Slim	MT2, MT3, Nano, Palon, Wall, Panel, Slim	MT2, MT3, Nano, Palon, Wall, Panel, Slim		
		SRF55Vxx (my-d vicinity)	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>
		Tag-it	✓	✓	✓	✓	✓
Pico Pass		✓ <sup>4)</sup>	✓ <sup>4)</sup>	✓ <sup>4)</sup>	✓ <sup>1)</sup>	✓ <sup>1)</sup>	
LEGIC Prime		✓	✓	✓	✓	✓	
125 kHz / 134.2 kHz <sup>8)</sup>	AWID	✓	✓	✓	✓	✓	
	Cardax	✓	✓	✓	✓	✓	
	CASI-RUSCO	✓	✓	✓	✓	✓	
	Cotag	✓	✓	✓	✓	✓	
	Deister	✓ <sup>6)</sup>	✓ <sup>6)</sup>	✓ <sup>6)</sup>	✓ <sup>6)</sup>	✓ <sup>6)</sup>	
	EM4100, 4102, 4200 <sup>7)</sup>	✓	✓	✓	✓	✓	
	EM4050, 4150, 4450, 4550	✓	✓	✓	✓	✓	
	EM4305	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	
	FDX-B, EM4105	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	
	G-Prox	✓ <sup>6)</sup>	✓ <sup>6)</sup>	✓ <sup>6)</sup>	✓ <sup>6)</sup>	✓ <sup>6)</sup>	
	HID DuoProx II (1336)	✓	✓	✓	✓	✓	
	HID ISO Prox II (1386)	✓	✓	✓	✓	✓	
	HID Micro Prox (1391)	✓	✓	✓	✓	✓	
	HID ProxKey III (1346)	✓	✓	✓	✓	✓	
	HID Prox	✓	✓	✓	✓	✓	
	HID Prox II (1326)	✓	✓	✓	✓	✓	
	HITAG 1, 2, S	✓ <sup>9)</sup>	✓ <sup>9)</sup>	✓ <sup>9)</sup>	✓ <sup>9)</sup>	✓ <sup>9)</sup>	
	ICT	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	
	IDTECK	✓	✓	✓	✓	✓	
	Indala	✓	✓	✓	✓	✓	
	ioProx	✓	✓	✓	✓	✓	
	ISONAS	✓	✓	✓	✓	✓	
	Keri	✓	✓	✓	✓	✓	
	Miro	✓	✓	✓	✓	✓	
	Nedap	✓ <sup>6)</sup>	✓ <sup>6)</sup>	✓ <sup>6)</sup>	✓ <sup>6)</sup>	✓ <sup>6)</sup>	
	Nexwatch	✓	✓	✓	✓	✓	
	PAC	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	
	Pyramid	✓	✓	✓	✓	✓	
	Q5	✓	✓	✓	✓	✓	
	T5557, T5567, T5577	✓	✓	✓	✓	✓	
	TIRIS/HDX	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	✓ <sup>8)</sup>	
	TITAN (EM4050)	✓	✓	✓	✓	✓	
	UNIQUE	✓	✓	✓	✓	✓	
	ZODIAC	✓	✓	✓	✓	✓	

1)UID only 2)r/w enhanced security features on request 3)r/w in direct chip command mode 4)UID only, read/write on request 5)UID + r/w public area 6)Hash value only 7)Only emulation of 4100, 4102 8)On request 9)Without encryption 10)UID + PAC (CSN & Facility Code), r/w on request 11)In preparation 12) 125/134.2kHz 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

(((●))) RFID Elatec Systems		Single Frequency (125 kHz or 13.56 MHz + NFC + Bluetooth Low Energy)							
					Option Standard	Option I	Option Standard	Option P	
with antenna →		Mini Reader	TWN3 MIFARE	TWN3 LEGIC NFC	TWN4 Mini Reader	TWN4 Mini Reader I	MT2 LF	MT 2 LF P	
without antenna →					MT 2 HF & MT 3 HF	MT 2 HF I & MT 3 HF I	MT 3 LF	MT 3 LF P	
					Nano HF	Nano HF I	Nano LF	Nano LF P	
<b>13.56 MHz</b>	<b>ISO14443A</b>	LEGIC Advant	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓	✓ <sup>1)</sup>	✓ <sup>1)</sup>		
		MIFARE Classic, Mini	✓	✓	✓ <sup>1)</sup>	✓	✓		
		MIFARE Classic EV1	✓ <sup>2)</sup>	✓ <sup>2)</sup>	✓ <sup>1)</sup>	✓ <sup>2)</sup>	✓ <sup>2)</sup>		
		MIFARE DESFire Light	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>11)</sup>	✓ <sup>11)</sup>		
		MIFARE DESFire EV1	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓	✓	✓		
		MIFARE DESFire EV2	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>11)</sup>	✓ <sup>11)</sup>		
		MIFARE Plus S, X	✓	✓ <sup>1)</sup>	✓	✓	✓		
		MIFARE Pro X	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>2)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>		
		MIFARE Smart MX	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>2)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>		
		MIFARE Ultralight	✓	✓	✓	✓	✓		
		MIFARE Ultralight C	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓	✓	✓		
		MIFARE Ultralight EV1	✓ <sup>2)</sup>	✓ <sup>2)</sup>	✓ <sup>2)</sup>	✓ <sup>2)</sup>	✓ <sup>2)</sup>		
		NTAG2xx	✓ <sup>2)</sup>	✓ <sup>2)</sup>	✓ <sup>2)</sup>	✓	✓		
		PayPass	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>		
		SLE44R35	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>		
	SLE66Rxx (my-d move)	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>			
	Topaz				✓	✓			
	HID iCLASS SEOS	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓ <sup>10)</sup>			
	Calypto	✓ <sup>1)</sup>		✓ <sup>2)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>			
	Calypto Innovatron protocol				✓ <sup>3)</sup>	✓ <sup>3)</sup>			
	CEPAS	✓ <sup>1)</sup>		✓ <sup>2)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>			
	HID iCLASS	✓ <sup>1)</sup>		✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓			
	CTS				✓	✓			
	Moneo	✓ <sup>1)</sup>		✓ <sup>2)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>			
	Pico Pass	✓ <sup>1)</sup>		✓ <sup>3)</sup>	✓ <sup>4)</sup>	✓ <sup>4)</sup>			
	SRI4K, SRIX4K	✓			✓	✓			
	SRI512, SRT512	✓			✓	✓			
	<b>ISO18092/ECMA-340</b>	NFC Forum Tag Type 1-5	Type 2-4	Type 2-4	Type 2-5	Type 1-5	Type 1-5		
		NFC Peer-to-Peer				✓	✓		
		Sony FeliCa	✓ <sup>1)</sup>		✓ <sup>3)</sup>	✓ <sup>5)</sup>	✓ <sup>5)</sup>		
	<b>ISO15693</b>	EM4x33			✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>		
		EM4x35			✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>		
		HID iCLASS			✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓		
		HID iCLASS SE/SR/Elite			✓ <sup>1)</sup>	✓ <sup>1)</sup>	✓		
		iCODE SLI			✓ <sup>3)</sup>	✓	✓		
		LEGIC Advant			✓	✓ <sup>1)</sup>	✓ <sup>1)</sup>		
		M24LR16/64			✓ <sup>3)</sup>	✓	✓		
		MB89R118/119				MT2, MT3, Nano	MT2, MT3, Nano		
		SRF55Vxx (my-d vicinity)			✓ <sup>3)</sup>	✓ <sup>3)</sup>	✓ <sup>3)</sup>		
		Tag-it			✓ <sup>3)</sup>	✓	✓		
	Pico Pass			✓ <sup>1)</sup>	✓ <sup>4)</sup>	✓ <sup>4)</sup>			
	<b>LEGIC Prime</b>			✓					
	<b>125 kHz / 134.2 kHz<sup>8)</sup></b>	AWID						✓	✓
		Cardax						✓	✓
		CASI-RUSCO						✓	✓
Cotag								✓	
Deister							✓ <sup>6)</sup>	✓ <sup>6)</sup>	
EM4100, 4102, 4200 <sup>7)</sup>							✓	✓	
EM4050, 4150, 4450, 4550							✓	✓	
EM4305							✓ <sup>8)</sup>	✓ <sup>8)</sup>	
FDX-B, EM4105							✓ <sup>8)</sup>	✓ <sup>8)</sup>	
G-Prox								✓ <sup>6)</sup>	
HID DuoProx II (1336)								✓	
HID ISO Prox II (1386)								✓	
HID Micro Prox (1391)								✓	
HID ProxKey III (1346)								✓	
HID Prox								✓	
HID Prox II (1326)								✓	
HITAG 1, 2, S							✓ <sup>9)</sup>	✓ <sup>9)</sup>	
ICT							✓ <sup>8)</sup>	✓ <sup>8)</sup>	
IDTECK							✓	✓	
Indala								✓	
ioProx								✓	
ISONAS							✓	✓	
Keri							✓	✓	
Miro							✓	✓	
Nedap							✓ <sup>6)</sup>	✓ <sup>6)</sup>	
Nexwatch								✓	
PAC							✓ <sup>8)</sup>	✓ <sup>8)</sup>	
Pyramid							✓	✓	
Q5							✓	✓	
T5557, T5567, T5577							✓	✓	
TIRIS/HDX						✓ <sup>8)</sup>	✓ <sup>8)</sup>		
TITAN (EM4050)						✓	✓		
UNIQUE						✓	✓		
ZODIAC						✓	✓		

<sup>1)</sup>UID only <sup>2)</sup>r/w enhanced security features on request <sup>3)</sup>r/w in direct chip command mode <sup>4)</sup>UID only, read/write on request <sup>5)</sup>UID + r/w public area <sup>6)</sup>Hash value only <sup>7)</sup>Only emulation of 4100, 4102 <sup>8)</sup>On request <sup>9)</sup>Without encryption <sup>10)</sup>UID + PAC (CSN & Facility Code), r/w on request <sup>11)</sup>In preparation <sup>12)</sup>125/134.2kHz 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 GmbH**  
Zeppelinstr. 1  
82178 Puchheim • Germany  
P +4989 552 9961 0 • F +4989 552 9961 129  
E-Mail: info-rfid@elatec.com

**ELATEC USA INC.**  
4203 SW High Meadows Ave  
Palm City • FL 34990 • USA  
P +1 772 210 2263 • F +1 772 382 3749  
E-Mail: americas-info@elatec.com

**ELATEC TECHNOLOGY (SHENZHEN) LLC**  
No. 716 Industrial Bank Tower  
Futian District • Shenzhen • China  
P/F +86 755 2394 6014  
E-Mail: apac-info@elatec.com

Elatec reserves the right to change any information or data in this document without prior notice. Elatec declines all responsibility for the use of this product with any other specification but the one mentioned above. Any additional requirement for a specific customer application has to be validated by the customer himself at his own responsibility. Where application information is given, it is only advisory and does not form part of the specification. Disclaimer: All names used in this document are registered trademarks of their respective owners.