

Kofax Micro Card Reader

Product specifications

	Multi-Card	iClass Seos	iClass and Legic
Orderable number	See pricelist/orderable items or contact support@baltech.de .		
Environmental compliance	RoHS, China RoHS, REACH, WEEE		
Certifications ¹	Individual country certification varies by card reader. Please contact support@baltech.de for a full list.		
Module housing material	PC/PMMA		
Module dimensions (L x W x H)	57 x 35 x 9 mm		
Module weight (without cable)	15 g		
Delivery scope (standard set as known from Kofax)	Reader module, snap-together Brick housing (for external installation), cable kit (see next row), "Place Card Here" sticker, 3M self-adhesive mounting tape, self-adhesive velcro mounting stripes, cable ties All items also orderable individually. See pricelist/orderable items or this video.		
Cable kit	1.8 m, USB A plug (for use with Brick housing for external installation) 12 cm, USB A plug (Xerox, Samsung, Kyocera pockets) 50 cm, USB mini-B plug (Ricoh, HP HIP 1 pockets) 9 cm, 90 degrees USB mini-B plug (HP HIP 2 pocket) All cables also orderable individually. See pricelist/orderable items or this video.		
Special cables	15 cm, USB mini-B socket (HP HIP 1 pocket special use case) Any other required cables can be provided on request.		
Brick housing material	PC/ABS, quartz white		
Brick housing dimensions (L x W x H)	85 x 48 x 17 mm		
Housed weight (with 1.8 m cable)	95 g		
Package dimensions (L x W x H)	175 x 90 x 53 mm		
Packaged weight	175 g		
Visual indicator	Tri-color LED (red, green, blue)		
Audible indicator	Beeper (magnetic transducer) ²		
Host interface	USB 2.0 Full Speed (USB 1.1 compatible)		
Host protocol	USB HID, USB HID Keyboard ³ (works with native drivers included in Windows, MAC, Linux, etc.)		
Host interface security	Authentication, mutual Authentication, AES encryption ⁷		
Voltage	4.7 to 5.5 V		
Absolute maximum current	300 mA		
Maximum operation current	210 mA	260 mA	235 mA
Average operating current	150 mA	175 mA	165 mA
Operating environment	-20 to +55 °C, 10 to 90% RH (non-condensing)		
Storage environment	-25 to +65 °C, 10 to 90% RH (non-condensing)		
Reliability	500,000 hours MTBF		
Compatible low frequency (LF) card types	AWID Cardax (raw data only) ⁵ Cotag Deister EM-Marin FDX-B ⁵ G-Prox HID Indala ASP, ASP+ (hash value) ¹⁰ HID Proximity ¹⁰ Hitag 1, 2 (256, 2048), S Honeywell NexWatch Quadrakey	IDTECK ³ ioProx ³ Keri ¹⁰ Miro Pyramid/ Farpointe Data Q5 ⁵ Radio Key/ SecuraKey Sokymat Unique ³ T5567/T5557 ⁵ Titan ⁵ Zodiac ⁵	AWID ³ Cardax (raw data only) ^{3,5} Cotag ³ Deister ³ EM-Marin ³ FDX-B ^{3,5} G-Prox ³ HID Indala ASP, ASP+ (hash value) ³ HID Proximity ³ Hitag 1, 2 (256, 2048), S ³ Honeywell NexWatch Quadrakey ³

	Multi-Card	iClass Seos	iClass and Legic			
LF antenna type	Wire-wound					
LF center frequency	125 kHz					
LF read range ⁶	Up to 55 mm					
LF response time	150 to 700 ms (depending on card type)					
Compatible high frequency (HF) card types	HID iCLASS, iCLASS SE (UID only) ⁷ HID iCLASS Seos (UID only) ^{7,8} LEGIC Advant (UID only) ⁷ Calypso ISO 14443 A/B general, including: • Cepas • Infineon my-d proximity • NFC Forum Tag 1-4 • NXP SmartMX, ProX • Paypass • SRIX512, SRIX4K	ISO 15693 general, including: • EM 4033, 4035 • NXP iCode • Infineon my-d vicinity • Tag-it ISO Mifare, including: • Classic (1K, 4K, Mini) • DESFire, -EV1,2,3 (2K, 4K, 8K) • Plus(-S, -X, L1, L2, L3) • Ultralight, -C Pico Pass Rijkspas Sony FeliCa	HID iCLASS (Full decoding) HID iCLASS SE, Seos (Full decoding) LEGIC Advant (UID only) ^{3,7} Calypso ³ ISO14443 A/B general ³ , including: • Cepas • Infineon my-d proximity • NFC Forum Tag 1-4 • NXP SmartMX, ProX • Paypass • SRIX512, SRIX4K	ISO 15693 general ³ , including: • EM 4033, 4035 • Infineon my-d vicinity • NXP iCode • Tag-it ISO Mifare ³ , including: • Classic (1K, 4K, Mini) • DESFire, -EV1,2,3 (2K, 4K, 8K) • Plus (-S, -X, L1, L2, L3) • Ultralight, -C Pico Pass ³ Rijkspas ³ Sony FeliCa ³	HID iCLASS (Full decoding) HID iCLASS SE, Seos (UID Only) ^{3,7,8} LEGIC Prime, Advant (Full decoding) Calypso ³ ISO 14443 A/B general ³ , including: • Cepas • Infineon my-d proximity • NFC Forum Tag 1-4 • NXP SmartMX, ProX • Paypass • SRIX512, SRIX4K	ISO 15693 general ³ , including: • EM 4033, 4035 • Infineon my-d vicinity • NXP iCode • Tag-it ISO Mifare ³ , (UID only) PicoPass (UID only) ^{3,7} Sony FeliCa (UID/ IDm Only) ^{3,7}
HF antenna type	Wire-wound					
HF center frequency	13.56 MHz					
HF read range ⁶	Up to 80 mm					
HF response time	30 to 300 ms					
HF encryption support ⁹	AES, DES, 3DES, 3K3DES, MAC, Mifare Classic, DESFire, DESFire-EV1, Mifare Plus L1, L2, L3	AES, DES, 3DES, 3K3DES, ECC, MAC, RSA, HID iCLASS, iCLASS SE, Seos, Mifare Classic, DESFire, DESFire-EV1, Mifare Plus L1, L2, L3	AES, DES, 3DES, 3K3DES, MAC, HID iCLASS, LEGIC, Mifare Classic, DESFire, DESFire-EV1, Mifare Plus L1, L2, L3			
Secure Access Module (SAM) socket	ID-000 format	ID-000 format, iCLASS SE Processor SAM pre-installed	ID-000 format			
Business Connect support (via NFC and Bluetooth®)	Android, iOS					
Bluetooth						
Classification	4.2, Low Energy					
Transmit power	Class 2 (maximum power: 2.5 mW / +4 dBm) Programmed output: 2 mW / +3 dBm					
Receive sensitivity	-90 dBm					

Notes:

- Individual country certifications vary by reader model. Contact support@baltech.de to confirm availability in the countries of interest.
- Enabled by default, readers require configuration in order to disable.
- Disabled by default, readers require configuration in order to enable.
- Host interface authentication and encryption not available in USB HID keyboard emulation mode.
- Transponder is supported by reader hardware but special firmware/configuration may be required to recover a unique ID or other data.
- Range varies with transponder type and is based on the use of standard identification and financial (ISO 7811) sized cards with readers mounted to a non-metallic surface. Use of alternate transponder formats (fobs, stickers, mechanical keys with smart heads, etc.) or mounting to a metallic surface results in a reduction of the published read range.
- By default, readers return a Unique ID (UID) for each card or tag within a given transponder family. It is not possible for the reader to access other data stored in transponders designated "UID".
- iCLASS Seos UIDs can only be returned from Seos cards special ordered with Static UIDs, as randomized UIDs are unsuitable for user identification and ignored by default.
- Access to encrypted data requires customization of the reader via secure configuration files. For more information contact support@baltech.de.
- The license to read HID Prox, Indala, or Keri cards is **not** included when you order the standard set variants 12115-610-53 or 12117-810-53, or when you order the Multi-Card or iClass and SEOS module individually. If needed, the license can be added using a BALTECH LicenseCard (see [pricelist/orderable items](#) or [this video](#)).