

# Kofax Micro Card Reader

	Multi-Card	iClass Seos + Multi-Card	iClass and Legic			
Orderable Number	Contact your sales representative.					
Environmental Compliance	RoHS, China RoHS, REACH, WEEE					
Certifications <sup>1</sup>	Individual country certification varies by card reader. Please contact your Kofax Sales representative 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					
Included Cables	1.8 m, USB A plug (for use with external housing) 12 cm, USB A plug (Xerox, Samsung, Kyocera pockets) 50 cm, USB mini-B plug (Ricoh, HP HIP 1 pockets) 9 cm, right angle USB mini-B plug (HP HIP 2 pocket)					
Separately Available	15 cm, USB mini-B socket (HP HIP 1 pocket special use case). Contact your sales representative.					
External Housing Material	PC/ABS, Quartz White					
External Housing Dimensions (L x W x H)	85 x 48 x 17 mm					
Housed Weight (with 1.8 m cable)	95 g					
Packaging Includes	Reader Module, External Housing, Cables Kit, 'Place Card Here' Sticker, Double-sided Tape, Velcro, Cable Ties, Instruction Sheet					
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) <sup>2</sup>					
Interface	USB 2.0 Full Speed (USB 1.1 Compatible)					
Host Protocol	USB HID, USB HID Keyboard <sup>3</sup> (works with native drivers included in Windows, MAC, Linux, etc.)					
Host Interface Security	Authentication, Mutual Authentication, AES Encryption <sup>7</sup>					
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) <sup>5</sup> Cotag Deister EM-Marin FDX-B <sup>5</sup> G-Prox HID Indala ASP, ASP+ (hash value) HID Proximity Hitag 1, 2 (256, 2048), S Honeywell Nexwatch Quadrakey	IDTECK ioProx Keri Miro Pyramid / Farpointe Data Q5 <sup>5</sup> Radio Key / SecuraKey Sokymat Unique T5567/T5557 <sup>5</sup> Titan <sup>5</sup> Zodiac <sup>5</sup>	AWID <sup>3</sup> Cardax (raw data only) <sup>3,5</sup> Cotag <sup>3</sup> Deister <sup>3</sup> EM-Marin <sup>3</sup> FDX-B <sup>3,5</sup> G-Prox <sup>3</sup> HID Indala ASP, ASP+ (hash value) <sup>3</sup> HID Proximity <sup>3</sup> Hitag 1, 2 (256, 2048), S <sup>3</sup> Honeywell Nexwatch Quadrakey <sup>3</sup>	IDTECK <sup>3</sup> ioProx <sup>3</sup> Keri <sup>3</sup> Miro <sup>3</sup> Pyramid / Farpointe Data <sup>3</sup> Q5 <sup>3,5</sup> Radio Key / SecuraKey <sup>3</sup> Sokymat Unique <sup>3</sup> T5567/5557 <sup>3,5</sup> Titan <sup>3,5</sup> Zodiac <sup>3,5</sup>	AWID <sup>3</sup> Cardax (raw data only) <sup>3,5</sup> Cotag <sup>3</sup> Deister <sup>3</sup> EM-Marin <sup>3</sup> FDX-B <sup>3,5</sup> G-Prox <sup>3</sup> HID Indala ASP, ASP+ (hash value) <sup>3</sup> HID Proximity <sup>3</sup> Hitag 1, 2 (256, 2048), S <sup>3</sup> Honeywell Nexwatch Quadrakey <sup>3</sup>	IDTECK <sup>3</sup> ioProx <sup>3</sup> Keri <sup>3</sup> Miro <sup>3</sup> Pyramid / Farpointe Data <sup>3</sup> Q5 <sup>3,5</sup> Radio Key / SecuraKey <sup>3</sup> Sokymat Unique <sup>3</sup> T5567/T5557 <sup>3,5</sup> Titan <sup>3,5</sup> Zodiac <sup>3,5</sup>

# PRODUCT SPECIFICATIONS

	Multi-Card	iClass Seos + Multi-Card	iClass and Legic			
<b>LF antenna type</b>	Wire-wound					
<b>LF center frequency</b>	125 kHz					
<b>LF read range <sup>6</sup></b>	Up to 55 mm					
<b>LF response time</b>	150 to 700 ms (depending on card type)					
	HID iCLASS, iCLASS SE (UID only) <sup>7</sup> HID iCLASS Seos (UID only) <sup>7,8</sup> LEGIC Advant (UID only) <sup>7</sup> Calypso ISO14443 A/B general, including: • Cepas • Infineon my-d proximity • NFC Forum Tag 1-4 • NXP SmartMX, ProX • Paypass • SRIX512, SRIX4K	ISO15693 general, including: • EM 4033, 4035 • NXP iCode • Infineon my-d vicinity • Tag-it ISO Mifare, including: • Classic (1K, 4K, Mini) (2K, 4K, 8K) • Plus (-S, -X, L1, L2, L3) • Ultralight, -C Pico Pass Rijkspas Sony FeliCa	HID iCLASS (Full decoding) HIDiCLASSE, Seos (Full decoding) LEGIC Advant (UID only) <sup>3,7</sup> Calypso <sup>3</sup> ISO14443 A/B general <sup>3</sup> , including: • Cepas • Infineon my-d proximity • NFC Forum Tag 1-4 • NXP SmartMX, ProX • Paypass • SRIX512, SRIX4K	ISO15693 general <sup>3</sup> , including: • EM 4033, 4035 • Infineon my-d vicinity • NXP iCode • Tag-it ISO Mifare <sup>3</sup> , including: • Classic (1K, 4K, Mini) • DESfire, -EV1,2,3 (2K, 4K, 8K) • Plus (-S, -X, L1, L2, L3) • Ultralight, -C Pico Pass <sup>3</sup> Rijkspas <sup>3</sup> Sony FeliCa <sup>3</sup>	HID iCLASS (Full decoding) HID iCLASS SE, Seos (UID Only) <sup>3,7,8</sup> LEGICPrime, Advant (Full decoding) Calypso <sup>3</sup> ISO14443 A/B general <sup>3</sup> , including: • Cepas • Infineon my-d proximity • NFC Forum Tag 1-4 • NXP SmartMX, ProX • Paypass • SRIX512, SRIX4K	ISO15693 general <sup>3</sup> , including: • EM 4033, 4035 • Infineon my-d vicinity • NXP iCode • Tag-it ISO Mifare <sup>3</sup> , (UID only) PicoPass (UID Only) <sup>3,7</sup> Sony FeliCa (UID/IDm Only) <sup>3,7</sup>
<b>HF antenna type</b>	Wire-wound					
<b>HF center frequency</b>	13.56 MHz					
<b>HF read range <sup>6</sup></b>	Up to 80 mm					
<b>HF response time</b>	30 to 300 ms					
<b>HF encryption support <sup>9</sup></b>	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			
<b>Secure Access Module (SAM) socket</b>	ID-000 Format	ID-000 format, iCLASS SE Processor SAM pre-installed	ID-000 Format			
<b>Bluetooth</b>						
<b>Classification</b>	4.2, Low Energy					
<b>Transmit Power</b>	Class 2 (maximum power: 2.5 mW / +4 dBm) Programmed output: 2 mW / +3 dBm					
<b>Receive Sensitivity</b>	-90 dBm					

## Notes:

- Individual country certifications vary by reader model. Contact your Kofax sales representative 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 your Kofax sales representative.