Equitrac® ID Card Reader
Product Specs

	Mifare (gen 2)	HID/Indala (gen 2)	Multi-Card	Multi-Card + SAM & iClass	Legic (gen 2)
Orderable Part Number:	CRU00X02	CRU00Z02	CRU0MF02	CRU0MC02	CRU00Y02
Host Interface:	USB 2.0 Full Speed (USB 1.1 Compatible)				
Host Connector:	USB Type A Plug				
Host Protocol:	USB HID (works with native drivers included in Windows, Mac, Linux and most other operating systems) USB HID keyboard emulation (requires programming of reader with Stock Configuration)				
Host Interface Security:	Authentication, Mutual Authentication, AES Encryption[1]				
Visual Indicator:	Bi-color LED (Red/Green)				
Audible Indicator:	Piezo Beeper (enabled via programming of reader with Stock Configuration)				
Power Supply (USB VBUS):	4.7 to 5.5 VDC				
Absolute Max Current:	300 mA				
Max Operating Current:	165 mA	80 mA	185 mA	210 mA	200 mA
Average Operating Current:	140 mA	55 mA	100 mA	100 mA	110 mA
Response Time[7]:	75 to 580 ms				
Operating Environment:	-20 to +60 °C, 20 to 80% RH (non condensing)				
Storage Environment:	-25 to +70 °C, 10 to 90% RH (non condensing)				
MTBF:	500,000 Hours				
Housing:	Injection Molded PC/ABS, Quartz White				
Housing Size, L x W x H:	85 x 48 x 17 mm				
Weight, with cable:	93 g	96 g	98 g	100 g	102 g
Cable Length:	1.8 m				
Package Size, L x W x H:	175 x 90 x 53 mm				
Packaged Weight:	143 g	146 g	148 g	150 g	152 g
Environmental Compliance:	RoHS 2, China RoHS, REACH, WEEE[2]				
Compatible Low Frequency (LF) Transponders	n/a	• AWID • Cardax (raw data only)[4] • Deister • EM 4100/4102 • EM 4205/4305 • EM 4450/4550, 4469/4569 • FDX-B[4] • G-Prox, HID Indala ASP, HID Indala ASP+ (raw data only)[4] • HID Proximity • Hitag 1 / 2 (256, 2048) • Hitag S • Honeywell Nexwatch Quadrakey • ioProx • Keri • Miro • Pyramid/Farpointe Data • Q53[4] • Radio Key/SecuraKey • Sokymat Unique • T5567, T5557[4] • Titan[4] • Zodiac[4]				n/a
LF Read Range[5]:	n/a	10 to 30 mm			n/a

	Mifare (gen 2)	HID/Indala (gen 2)	Multi-Card	Multi-Card + SAM & iClass	Legic (gen 2)
Compatible High Frequency (HF) Transponders	HID iClass (UID only) [3] Infineon my-d proximity ISO14443 A/B general, including: • SRx512 • NXP SMartMX, ProX • Paypass • Cepas • Calypso • NFC Forum Tag 1-4 ISO15693 General, including: • NXP iCode • EM 4033, 4035 • Tag-it ISO • Infineon my-d vicinity LEGIC Advant (UID only) [3] Mifare Classic (1K, 4K, Mini) Mifare DESfire, -EV1 (2K, 4K, 8K) Mifare Plus (-S, -X, L1, L2, L3) Mifare Ultralight, -C Pico Pass Sony FeliCa	n/a	HID iClass (UID only) [3] Infineon my-d proximity ISO14443 A/B general, including: • SRx512 • NXP SMartMX, ProX • Paypass • Cepas • Calypso • NFC Forum Tag 1-4 ISO15693 General, including: • NXP iCode • EM 4033, 4035 • Tag-it ISO • Infineon my-d vicinity LEGIC Advant (UID only) [3] Mifare Classic (1K, 4K, Mini) Mifare DESfire, -EV1 (2K, 4K, 8K) Mifare Plus (-S, -X, L1, L2, L3) Mifare Ultralight, -C Pico Pass Sony FeliCa	HID iClass (Full decoding) Infineon my-d proximity ISO14443 A/B general, including: • SRx512 • NXP SMartMX, ProX • Paypass • Cepas • Calypso • NFC Forum Tag 1-4 ISO15693 general, including: • NXP iCode • EM 4033, 4035 • Tag-it ISO • Infineon my-d vicinity LEGIC Advant (UID only) [3] Mifare Classic (1K, 4K, Mini) Mifare DESfire, -EV1 (2K, 4K, 8K) Mifare Plus (-S, -X, L1, L2, L3) Mifare Ultralight, -C Pico Pass Sony FeliCa	LEGIC Prime LEGIC Advant / ISO14443 LEGIC Advant / ISO15693 ISO 14443 A/B general (UID only) [3] ISO 15693 general (UID only) [3] Sony FeliCa (UID/IDm only) [3]
HF Read Range[5]:	20 to 85 mm	n/a	15 to 85 mm		35 to 100 mm
HF Encryption Support[6]:	Mifare Classic, DES, 3DES, 3K3DES, AES, MAC, DESFire, DESFire-EV1, Mifare Plus L1, L2, L3		Mifare Classic, DES, 3DES, 3K3DES, AES, MAC, DESFire, DESFire-EV1, Mifare Plus L1, L2, L3	HID iClass SE, Mifare Classic, DES, 3DES, 3K3DES, AES, MAC, DESFire, DESFire-EV1, Mifare Plus L1, L2, L3	AES, DES, 3DES, LEGIC

Notes:

1. Host interface authentication and encryption not available in USB HID Keyboard emulation mode.
2. Individual country certification varies by card reader. Please contact your Nuance Sales representative for a full list.
3. 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 any other data stored in transponders designated 'UID only'.
4. Transponder is supported by reader hardware but special firmware may be required to recover a unique ID or other data. Programmed samples of customer cards must be submitted for evaluation, contact your Nuance Sales representative.
5. 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.
6. Access to encrypted transponder data requires customization of the reader via creation and download of secure configuration files. For more information contact your Nuance Sales representative.
7. Response time is dependent on the reader configuration and number of card systems in use. Response to first presentation of a given transponder occurs within 580 ms, response time for subsequent presentations of similar transponder types is reduced.

About Nuance Communications, Inc.

Nuance Communications is reinventing the relationship between people and technology. Through its voice and language offerings, the company is creating a more human conversation with the many systems, devices, electronics, apps and services around us. Every day, millions of people and thousands of businesses experience Nuance through intelligent systems that can listen, understand, learn and adapt to your life and your work. For more information, please visit nuance.com.

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