

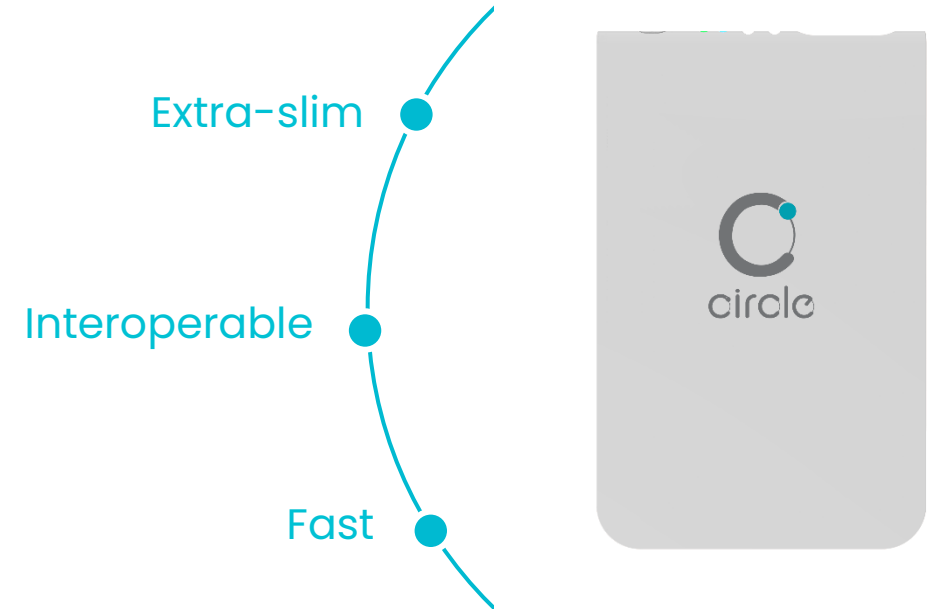


CIR415A

Bluetooth® Contactless Smart Card Reader

CIR415A Bluetooth® Contactless Smart Card Reader combines the latest Bluetooth® and contactless technologies to offer you an ideal solution for wireless contactless applications.

- Supports Bluetooth® 5.0
- Supports ISO/IEC 14443, ISO/IEC 18092 and ISO/IEC 15693 standards
- Supports ISO/IEC 14443-4 Type A & B cards, ISO/IEC 15693-3 cards, MIFARE® series, FeliCa, J-LIS cards, Calypso and NFC Forum Type 1/2/3/4/5 Tags
- Supports 1 x ISO/IEC 7816 Part 3/4 SAM slot (Optional)
- Supports extended APDU
- Complies with CCID standard
- Conforms to PC/SC specifications
- Firmware upgradable
- Works on different operating systems
- A transparent card holder is included



Accessory

- Card Holder (Removeable)





CIR415A

 Bluetooth® Contactless Smart Card Reader

Contactless Smart Card Interface

| | |
|----------------------|--|
| Standard | ISO/IEC 14443, ISO/IEC 18092, ISO/IEC 15693 |
| Protocol | T=CL (translated to T=1 for PC/SC compliance) |
| Operating Frequency | 13.56 Mhz |
| Supported Card Types | ISO/IEC 14443-4 Type A & B Cards, ISO/IEC 15693-3 Cards, MIFARE® series: Classic/ Plus/ Ultralight/ Ultralight C/ DESFire/ DESFire EV1/ DESFire EV2, etc, FeliCa (Standard/ Lite/ Plug), Calypso, J-LIS Cards, NFC Forum Type 1/2/3/4/5 Tags |
| Speed | 106/ 212/ 424/ 848 kbps (Default: 424 kbps) |
| Reading Distance | Up to 50 mm (depending on tag type) |
| Extended APDU | Support |

SAM Card Interface

| | |
|----------------------|---------------------------------|
| Standard | ISO/IEC 7816 Part 3/4 |
| Protocol | T=0, T=1 |
| Supported Card Types | ISO/IEC 7816 Class A (5V) cards |
| Supported Card Size | ID-000 (SIM size) |
| Speed | 9.6 – 125 kbps |
| Clock Frequency | 4.0 MHz |

Physical Characteristics

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|------------|--|
| Dimensions | With Card Holder: 96.1 mm (L) x 64.1 mm (W) x 8.9 mm (H); Without Card Holder: 94.7 mm (L) x 60.0 mm (W) x 6.0 mm (H) |
| Weight | 34.0 g (± 5 g) |
| Casing | Reader: White PC; Card Holder: Transparent ABS |

Host Interface

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|---------------------|--|
| Power Supply | USB Bus-powered or 400 mAh Rechargeable Lithium-ion Battery (charged through USB) |
| Current Consumption | <500 mA (Operating) |
| USB Standard | USB 2.0 Full Speed (12 Mbps) |
| USB Connector Type | Type C |
| USB Cable | 1m, Detachable USB Type A to C Cable |
| Bluetooth® Standard | BT 5.0 BLE (2 Mbps) |

Human Interface

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|--------|--|
| LED | 3 LEDs: Blue (Operation Status), Blue & Green (Mode), Red & Green (Power) |
| Buzzer | Monotone |

Software and Driver

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|---|--|
| Firmware Upgradeable | Support, via USB |
| Communication Channel Encryption | Bluetooth® Mode: AES-128 Encryption Algorithm (CBC Ciphering Mode) |
| Driver | USB Mode: CCID; Bluetooth® Mode: Proprietary |
| Application Programming Interface (API) | USB Mode: PC/SC; Bluetooth® Mode: Proprietary |

Operating Conditions

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|---------------------------------|--|
| Operating Temperature | 0 – 60 °C (not charging); 0 – 45 °C (charging) |
| Operating Humidity | Max. 85% (non-condensing) |
| Storage Temperature | -20 °C – 65 °C |
| Meantime Between Failure (MTBF) | 500,000 hours |

Compliance/ Certifications

| | |
|---------------------------|---|
| Standards/ Systems | ISO/IEC 14443, ISO/IEC 18092, ISO/IEC 15693, ISO/IEC 7816 (SAM slot), USB 2.0 Full Speed, CCID, Microsoft® WHQL, Bluetooth® 5.0 specification |
| Regulatory/ Environmental | EN 62368, CE, FCC, VCCI, MIC, BQB, TELEC, RoHS3, REACH |

Operational Environment

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|-----------------------------|--|
| Supported Operating Systems | USB Mode: Windows® 7 SP1 and above, Linux®, macOS® 10.12 and above, Android™ 6.0 and above; Bluetooth® Mode: Android™ 6.0 and above, iOS 10.0 and above |
|-----------------------------|--|

Ordering Information

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|--------------|--|
| Product Code | CIR415A-01: USB Type C (Female) Connector, with SAM slot |
| Accessory | Transparent Card Holder |