



Contact Smartcard Series

Technical Specifications



From the top-left: Grabba S-Series with BlackBerry® Bold™ 9780. Grabba S-Series in use with HTC Sensation and iPhone 4.

↓ FEATURES OF TECHNOLOGY FOR THE GRABBA CONTACT SMARTCARD READER

Read and Write to Microcontroller

Read and Write to the card microcontroller with T=0 and T=1 protocol.

Read and Write to popular Memory cards

Siemens - SLE4432/42, SLE4418/28, Atmel - AT88SC06, AT24CO1-16, STMicroelectronics - I2C and XI2C.

Standards

Compliant with ISO/IEC 7816.

Solid insertion

When the card is inserted it is held by the reader and the card will not accidentally disconnect.

→ ABOUT GRABBA AND TECHNOLOGIES

Grabba are experienced with contact smartcards. We offer only the best technology and capability with our Contact Smartcard readers for Smartphones/PDAs.

We have extensive experience T=0 (character-level transmission protocol, defined in ISO/IEC 7816-3) and T=1 (block-level transmission protocol, defined in ISO/IEC 7816-3) for contact smartcards.

With Grabba a large variety of combination readers are also available so you can include other reading technologies (e.g. RFID, Barcode, Magnetic Stripe, Signature Capture etc) in your Grabba so your purchase can match exactly all your needs both now and in the future.

Smartphones supported

- Blackberry
- Apple
- Android
- Windows Mobile

Grabba Contact Smartcard readers are used to read identification cards, transport cards, security cards, membership cards and stored payment cards. Common users are law enforcement, government departments, public infrastructure and payment verifiers.



CONTACT SMARTCARD READER SPECIFICATIONS

General Specifications

Size	174 x 80 x 43mm (6.85 x3.15 x 1.7")
Weight	140g Approx (4.9 oz)
Drop tests	Withstands multiple 2 Metre drops to concrete
Relative Humidity	5-95% (non-condensing)
Warranty	12 months from date of purchase (see warranty statement for details)
Battery type	Internal Rechargeable Lithium-Ion 3.7V
Capacity	800Mah
Charge Time	up to 5 hrs
Standards and Compliance	FCC-Part 15, CE, C-Tick (N14052), ROHS
Whats in the Box?	1 x Grabba Contact Smartcard reader, 1 x International Power Adaptor, 1 x User Guide

Note: this is a guide, specs may vary due to final configuration



The Grabba Smartcard Reader functions/data are accessed via the Grabba SDK. Be sure to check out the demo applications for software developers to ensure you get the full functionality available to your application.

Supported Software

Smartphone/PDA Operating Systems	BlackBerry, iPhone, Windows Mobile, Windows CE, PalmOS, Garnet, Linux
Development Environments	iOS, Java, Eclipse, .Net Compact Framework (VB.NET & C#.NET) and many others
Development SDK	SDK supplied upon Free membership for Developers into our Software Developer Program
Free Software available from Grabba	Grabba Browser application for iPhone/iPod. Keyboard Wedge application & Demo Program for other operating systems

Note: this is constantly changing, if it's not listed contact us

Performance Specifications

Grabba Series	X010
Smartcard Interface	ISO 7816 Class A, B and C (5V, 3V, 1.8V) T=0 and T=1 communication protocol Communication Speed – 115200 baud
Supported Memory Card Protocols	SLE4432/42, SLE4418/28, Atmel - AT88SC06, AT24CO1-16, STMicroelectronics - I2C and XI2C Others upon request
Smartcard contacts	ISO 8 Position Sliding contacts Minimum 10,000 cycles ESD protection – >10KV Auto Deactivation of card contacts upon card removal.

Note: this is a guide, performance may vary depending on conditions

ABOUT SMARTCARD TECHNOLOGIES

Smartcards are widely used around the world. Some smartcards are contact and some are non-contact using High Frequency RFID technology.

To successfully implement a contact smartcard reading application you must know the specifications of the target card. If you are not sure send a sample to Grabba for evaluation and testing.

The Grabba Smartcard Reader will read the contact smartcard data only however you can order Combination Grabba devices that can read other data capture technologies in the same unit. If you order a combination Contact smartcard reader and High Frequency RFID reader then you will be able to interact with both contact and non-contact smartcards (eg PayPass, payWave) in the one unit.

Grabba Technologies available:



Corporate HQ Office

Grabba International
1/12 Selhurst Street
Coopers Plains QLD, 4108 Australia
Phone: +61 (7) 3344 6599
Fax: +61 (7) 3344 5076
Email: sales@grabba.com

North American Office

Grabba Inc.
536 E Birmingham Road,
Burbank, Los Angeles CA 91504
Phone: +1 818 729 8328
Fax: +1 818 729 1954
Email: sales_na@grabba.com

European Office

Grabba Ltd.
London
United Kingdom
Email: sales_emea@grabba.com



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