

MiniSmart™

Intelligent Smart Card Reader



Tiny but rugged

The MiniSmart is the smallest reader proven to deliver reliable performance for more than 1,000,000 card cycles. The reader's chassis is molded from a glass-filled engineering plastic, supporting landing-style smart card contacts & card seated sensor. Moreover, the MiniSmart chassis discourages jamming due to debris particles entering through the slot. MiniSmart is small enough to adapt to a wide variety of space-limited applications, and has the advantage of being EMV 2000 level 1 approved.

Simplify Integration of Smart Cards

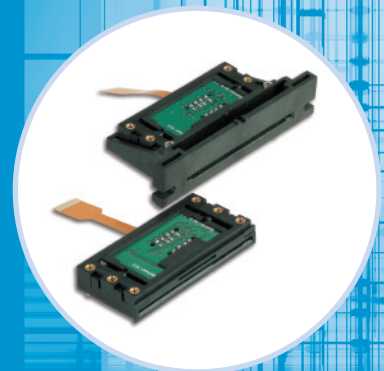
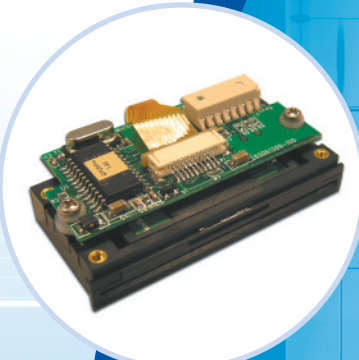
The MiniSmart Partial Insert Reader operates with both memory & microprocessor type Smart Cards (ICC's), conforming to ISO 7816 standards. MiniSmart communicates with ICC's through a low-force landing-style connector with gold-plated contacts that "land" and have a small "wiping" action to ensure dependable connections. The host & card interfaces are provided with GemCore™ technology from Gemplus. All components are EMV certified.

Configurable for Any Application

The Host interface is serial USB, RS232, or CMOS-UART. Protocols can be USB-CCID, Block Commands, or PC/SC depending on interface type. Mounting is accomplished with threaded inserts in the reader chassis. MiniSmart can be used with no bezel or there are two molded bezels available, standard or flush mount. Both bezels provide secure mounting for MiniSmart chassis, and an optional card slot "gate" is available to protect the reader from dust, debris, and casual vandalism.

Features and Benefits:

- Smallest size – fits anywhere a smart card is needed
- Designed tough – 1,000,000+ operations on all components
- Simplifies integration of Smart Cards into Applications
- Operates with ISO 7816 microprocessor or memory cards
- EMV™ 2000, Type Approval or compliance
- Manages the card interface link & communications
- Smart Card transfer rates – 9600 to 115200 bps
- Serial host interface link – USB-CCID, PC/SC, RS232, or CMOS-UART
- Reader power – 3V to 5V, Card power – 3.0V, or 5.0V
- Landing Smart Card contacts and card seated switch
- Bezels available with gates – standard or flush mount options



ID TECH MiniSmart MIN85-XX-100(a) Specifications

Host Interface

Physical Layer: Serial async, RS232 or CMOS, 1.2K to 115K baud
 USB-CCID Full Speed
 Protocol layer: RS232/CMOS – Command Blocks or PC/SC
 USB-CCID supporting PC/SC

ICC Interface

Compliance: ISO/IEC 7816-1, 2, 3, & 4 and EMV 2000 Level 1
 ICC Support: Number of cards = 1, Asynchronous, T=0 & T=1
 Synchronous (memory) cards
 Transmission: 9.6 Kbps to 115 Kbps speeds
 Electrical: Card power supply selections: 3 V or 5 V
 ESD Protection: 4 KV (human body model, contacts),
 Short Circuit: Current limitation protection

Mechanical

Media Thickness: 0.03 Nominal (0.025 min.; 0.035 inches max.)
 Card Seated: Switch when the ICC is fully seated
 ICC Contacts: Contact force, position, & plating per ISO7816 & EMV

Electrical

Power Supply: 2.85 VDC to 5.4 VDC
 Current: 12mA Typical w/no ICC, interface & card dependent
 Power Down: 100 μ A max in power down mode, CMOS interface
 ICC contacts: 0.5 Ohms Maximum

Durability

* All wear reliability and MTBF are based on operation in a benign environment.
 Card Connector: 1,000,000 cycles minimum*
 Chassis & Bezel: 1,000,000 card cycles minimum*
 MTBF: 300,000 Hours*

Environmental

Temperature: 32°F to 158°F (0°C to 70°C) Operating
 Temperature: -40°F to 185°F (-40°C to 85°C) Storage
 Humidity: Maximum 90% non-condensing

Outline Dimensions



IDTECH®

Value through Innovation

Headquarter:

10721 Walker Street Cypress, California 90630
 (714) 761-6368 Fax: (714) 761-8880
www.idtechproducts.com

ID TECH International Sales Office:

(450)465-5261 Montreal, Canada
robertop@idtechproducts.com

ID TECH Europe Sales Office:

+33 (0) 5 65 50 28 59 France
iann@idtechproducts.com

ISO 9001:2000 Certified