

## CardMan® 1021 USB

OMNIKEY, one of the world's leading manufacturers of innovative smart card readers, offers with the CardMan® 1021 a high-performance smart card reader in a small form factor for desktop as well as mobile usage. The CardMan® 1021 is an easy-to-install USB device suited for all contact smart card operations like online-banking or digital signature applications.



### Convenient and Easy Distribution

OMNIKEY has used its long years of experience in the smart card area to develop a small but robust smart card reader that follows the well-known high performance standards of OMNIKEY.

The CardMan® 1021 is easy to distribute in an envelope together with any smart card such as credit cards, e-ID cards or software for other applications. Hence it is ideally suited for a mass rollout of smart cards and related applications.

### High-Speed

Based on revolutionary chip technology, jointly developed with Atmel, the CardMan® 1021 supports reader-to-card data transmission rates of up to 420 KBits per second, exceeding the performance of other smart card readers.

### Applications

Applications for the new desktop smart card reader include digital signature, secure online banking and other online transactions, loyalty programs, healthcare solutions and many more future applications. Its small form makes the CardMan® 1021 the ideal choice for end-user applications where the handy size is decisive.

### Standards

The CardMan® 1021 complies with all relevant industry standards such as ISO 7816, EMV (Europay, MasterCard, Visa) 2000, Microsoft® WHQL, USB CCID, PC/SC and many more, it is open for almost any smart card for any application on any computer.

The usage within an application is based on standardized interfaces like PC/SC 2.0, OCF (Open Card Framework) or CT-API.



## CardMan® 1021

### Host Interface

USB 2.0 CCID <sup>1</sup> (also compliant with USB 1.1)	✓
Transmission speed	12 Mbps
Power supply	Bus powered

### Smart Card Interface

Compliant with ISO 7816 and EMV <sup>2</sup> 2000	✓
Supports T=0, T=1	✓
Supports 2-wire: SLE 4432/42 (S=10), 3-wire: SLE 4418/28 (S=9), SLE 4404	✓
Supports I <sup>2</sup> C	✓
Card Size	ID-1 (full size)
High-performance smart card interface (up to 420 Kbps when supported by card)	✓
Smart card clock frequency up to 8 MHz	✓
Supports 5V, 3V, and 1.8V smart cards ISO 7816 Class A, AB and C	✓
Supplies 60 mA current to power the smart card	✓
Smart card movement detection with auto power-off	✓
Automatic detection of smart card type	✓
Short circuit and thermal protection	✓
8 pin handling (C4/C8 supported)	✓

### Other features

Status indicator	Orange LED
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### Options

Customer specific logo or label	On request
Customer specific colors	On request

### Compliance/Certification

Microsoft WHQL <sup>3</sup> certified	✓
EMV <sup>2</sup> 2000 Level 1 certified	On request
ISO 7816	✓
USB 2.0 (1.1 compatible)	✓

### API

PC/SC 2.0 driver	✓
CT-API (on top of PC/SC)	✓
Synchronous-API (on top of (PC/SC)	✓
OCF (on top of (PC/SC)	✓

### PC /SC Driver Support

Windows® 2000	✓
Windows® XP	✓
Windows® 64bit(AMD64, EM64T, IA64)	✓
Linux®	✓
Mac® OS X	✓

### Embedded Technology

CardMan Smart@USB Chip set	✓
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### Hardware Specifications

Color	Black
Dimensions (LxBxH)	74 x 64 x 13mm 2.91" x 2.52" x 0.51"
Weight	48 gr/1.69 ounces
Operating temperature	10-55°C/ 32-131°F
Operating humidity	10-90% rH
Composition	Poly Carbonate
Connector cable	150 cm/ 59.1"
Durability	100,000 Insertions
Meantime between failure (MTBF)	500,000 Hours

### Safety and Environmental Standards

CE	✓
FCC	✓
UL	✓
VCCI	✓
MIC	✓

1= Chip Card Interface Device 2= Europay® MasterCard® Visa® 3= Windows® Hardware Quality Lab



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