



# MULTOS Product Directory

## *Section 11* Terminals

v7.00



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## Terminals

**Bradley Lomas Electrolok Ltd.**  
**Cyber-A Corporation Ltd.**  
**General Information Systems Ltd.**  
**Hitachi Ltd.**  
**International Verifact Inc.**  
**Keycorp Ltd.**  
**KOBIL Systems**  
**Mars Electronics International**  
**Towitoko AG**





**Bradley Lomas Electrolok Ltd.**



Bradley Lomas Electrolok is a leading U.K. Security Company. The Company has been providing intelligent security systems for over 30 years to a diverse base of clients with particular expertise in the fields of Education, Local Government, Banking, Healthcare, Transport and Retail.

BLE provide clients with complete solutions in the supply, installation, design and maintenance of CCTV, Access Control, Public Address, Door Entry and Intercom Systems.

The company has the ability to offer intelligent Access Control incorporating MULTOS and MIFARE technologies. BLE's 'smart card' access control readers are capable of interfacing with MULTOS and MIFARE on single standalone door entry with hard wire install and more sophisticated multi-site systems connected - e.g. via network and utilising existing LAN's and WAN's. This technology can support up to:

10,000 Readers  
1 million users  
and provides Photo ID

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## Cyber-A Corporation Ltd



Cyber-A Corporation Ltd (CBA) is a subsidiary of Willas-Array (Holdings) Limited. Willas-Array (Holdings) Limited is an international conglomerate with branches throughout Asia diversified interests in the OEM manufacturing equipment distribution.

The primary business focus of the Cyber-A Corporation Limited is on intelligent chip card related products. As a result of the successful launch of the smart card in Hong Kong we have gained substantial experience in the building of specialized smart card devices for a variety of applications and chip card platforms. CBA is a leading manufacturer of smart card products for a wide range of compatible devices such as chip card readers, POS terminals from transportation to ticketing, and PC smart card readers/writers. Our current range includes:

Key Fob balance reader

MiniStar – for transportation

TicketStar – for auto-ticketing

NanoStar – for vending or ECR

iReader – smart card reader/writer RS232C

iBank – for e-commerce Micro-payment Solution

We are welcome and open the opportunity to discuss your requirement.

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General Information Systems Ltd

**GIS**  
GENERAL INFORMATION  
SYSTEMS LIMITED



GIS is a design house based in Cambridge, England, specialising in Smart Card solutions. We have one of the largest ranges of Mondex hardware as shown below, all of which is fully compatible with Mondex on the MULTOS platform.

As a matter of policy GIS products are now equipped with Secure Application Exchange (SAX) so that new requirements of the card application can be downloaded to the Interface Device (IFD) as and when needed.

A new family of MULTOS-ready card readers is shortly to be announced which will meet the demanding parameters of the volume Smart Card market place by being both very low cost and having facility for secure personality modification.

GIS is a solutions developer for whom MULTOS is a major platform, We have implemented a variety of proprietary e-cash systems and other applications including ticketing, loyalty and secure ID.

Our approach is always modular so that fast time to market can be achieved at minimum expense

Please use our quotation form if you have an interest even if it is purely conceptual at this stage. Our creative solutions team will respond promptly to those using the form at <http://www.gis.co.uk/multos.htm> otherwise call us or e-mail us.

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## Hitachi

**HITACHI**  
Inspire the Next



Hitachi offers a wide variety of interface devices and terminals to customers rolling out smart card solutions. These range from key fobs and sleeves to telephones, cashless ATMs and kiosks. Our current range includes:

- Key Fob balance reader
- Sleeve ZM-S40
- Slim Wallet
- Telephone ZM-P10
- Telephone Adapter
- Cashless ATM M800-CA
- Smart Service Terminal (SST)
- RS232C-Manual Reader / Writer MX-350M
- RS232C-Automatic Reader / Writer MX-650A
- PCMCIA Reader / Writer (Short)
- PCMCIA Reader / Writer (Standard) MX-750P
- PCMCIA Reader / Writer Dual
- Floppy Disk Reader / Writer MX-950FD2

While this information is correct at the time of writing we are constantly improving and updating our range and would welcome the opportunity to discuss your requirements.

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## International Verifact Inc



IVI Checkmate is the third largest electronic transaction solutions provider in North America. The company designs, develops, and markets innovative payment and value-added solutions that optimize transaction management at the point-of-service in the retail, financial, hospitality, healthcare, and transportation industries. IVI Checkmate's software, hardware, and professional services minimize transaction costs, reduce operational complexity, and improve profitability for our customers in the U.S., Canada and Latin America. <http://www.ivicom.com>."

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Keycorp Limited

## KEYCORP LIMITED



Keycorp Limited offers end-to-end electronic commerce and smartcard solutions. One of the world's leading developers of smartcard operating systems, Keycorp produced the first implementation of MULTOS version 4.0 multi-application operating system.

Keycorp's expertise in smartcard systems is supported by strategic offerings including:

- card manufacturing
- terminal design and manufacturing
- secure PIN Pads and Internet-enabled terminals
- Nobil™ Internet payment gateway.

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**KOBIL Systems GmbH**

*Always a step ahead*



KOBIL Systems GmbH is a leading manufacturer of smart card readers and IT-security solutions. KOBIL is a privately held company, owned by Mr. Ismet Koyun. He founded his company 15 years ago and was manufacturing personal computers at the beginning. Since 1996 KOBIL has specialized in the development, manufacturing and distribution of multi-functional smart card terminals and smart card related solutions.

KOBIL's product range:

Security solutions:

- \* KOBIL Smart Key: For complete protection of work stations. Contains: CSP and PKCS#11 modules, WIN login (NT and 2000), digital signature and encryption of e-mails and files, protection of web-server
- \* SecOVID: A one-time-password generator on smart card with a portable PIN pad terminal or token. SecOVID permits most secure user identification to networks, e-banking accounts, web-sites, etc.

Smart card terminals:

- \* KAAN Twin (HBCI-Standard: Class 1): transparent low cost reader, features a double-sided card slot, therefore no adapter for SIM cards is needed
- \* KAAN Standard (HBCI-Standard: Class 2): has a 1x8 numeric display and a keypad, which permits secure PIN entry.
- \* KAAN Standard Plus: as KAAN Standard, but with a very modern design.
- \* KAAN Professional (HBCI-Standard: Class 3): has a 2x16 alpha-numeric display and a keypad. This terminal provides highest levels of security.

It is capable of executing secure payments in the internet meeting ZKA specifications (ZKA = the German Central Credit Committee)

- \* KAAN SIM: mini USB reader for SIM sized smart cards
- \* PCMCIA reader

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# Terminals

## Mars Electronics International



### Business

Mars Electronics International (MEI) is the leading global supplier of payment systems for unattended point-of-sale markets, including vending, gaming, amusement, parking, transport, and payphone. With a world-wide field base of more than 5,000,000 card, coin, and banknote payment systems, MEI sells and supports into more than 100 countries worldwide, and operates factories in the USA, UK, Switzerland and Mexico.

MEI is part of Mars Incorporated, whose brands include M&Ms, Twix, Mars, Bounty, Pedigree, and Whiskas.

The MultiCard<sup>®</sup> Smart Facilities Management system is a Smart Card based payment system targeted at Vending and Catering applications for corporate sites and campuses, and comprises a complete package of Vending Card Readers, Point of Sale Terminals, Smart Cards, and an easy-to-use Windows-based System Manager for managing the site. MultiCard<sup>®</sup> Smart is the first system to also accept the new electronic cash cards, including Mondex.

### Application

MultiCard<sup>®</sup> Smart Facilities Management system.

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Towitoko AG



## CHIPDRIVE™



Towitoko AG is a German manufacturer of smart card reader/writers. Our worldwide known product family is called CHIPDRIVE.

The company Towitoko has been founded by Tobias Wieler and Thomas Kohn in 1992.

In 2000 Towitoko changed into the joint-stock company Towitoko AG. An IPO is planned for the end of the year 2000.

Currently, the product range consists of:

- \* the smart card reader family CHIPDRIVE
- \* various smart card solutions for CHIPDRIVE, including application software for the retail market
- \* various custom-designed smart card solutions

The core business has been smart card readers and related software since the very beginning. We have developed technological advantages for our smart card readers with a sophisticated driver structure, a superior power supply, the low-cost design based on standard electronic components, and the shared mouse port. Various patents emphasize our technological dedication.

For the CHIPDRIVE product family, the typical applications are:

- \* e-banking
- \* network security
- \* digital signature and encryption
- \* electronic commerce
- \* administration of GSM cards
- \* CHIPDRIVE retail products for PC applications
- \* many proprietary systems based on our driver structure

The main advantages of Towitoko:

- \* market proven products with excellent reference projects
- \* superior with easy installation and trouble-free functionality
- \* versatile and comprehensive driver structure
- \* available in mass volume
- \* German design and quality

In addition we can provide you with complete end-user packages, i.e. hardpaper box, CD-ROM, manual etc. We incorporate various components into customized end-user fulfilment kits, ready to be distributed to your customers.

All CHIPDRIVES support a comprehensive driver structure with the most common APIs: PC/SC by Microsoft (MS logo for WIN98, NT & WIN2000), CT-API, OCF, NETS interface (Singapur), and LINUX-support, SCARD interface etc. etc.

This versatile driver support gives us access to many projects all over the world. Our smart readers are of course also compatible with the MULTOS platform and MONDEX type approved.

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