

# C-ZAM SMASH

The leading edge in secure payment terminals



The

C-ZAM/SMASH

is a multifunction payment terminal featuring modular design for ultimate versatility, a totally open Java-based architecture for integration into any existing payment system and total Banksys security.

**banksys**  
end-to-end transactions

# C-ZAM SMASH

*The C-ZAM/SMASH is the latest secure payment terminal from Banksys, the world leader in payment technologies. Designed with the full-range of payment applications in mind, the C-ZAM/SMASH features modular design for ultimate versatility, a totally open architecture for integration into any existing payment system and the total security that customers across the world have come to expect from Banksys.*

## Multifunction operations

The C-ZAM/SMASH is designed to perform the full range of terminal based applications from card reading to chip programming. As the potential range of applications for smart-cards expands, so the C-ZAM/SMASH offers total control over the card and its uses, allowing the easy integration of specialised functions.

C-ZAM/SMASH applications include:

- *Electronic payment*
- *Electronic purse*
- *Loyalty programs*
- *Smart vouchers*
- *Access control*
- *Custom applications*



The C-ZAM/SMASH includes readers for both magnetic strip and chip cards, allowing merchants to accept:

- *credit cards*
- *debit cards*
- *electronic purse*
- *other cards*

## Open architecture

The C-ZAM/SMASH operating system is designed around the core of the Java Virtual Machine from Sun Microsystems.

The use of the virtual machine allows the C-ZAM/SMASH to operate in any systems environment, including the all-important TCP/IP Internet protocol.

By virtue of its Java base, network administrators can develop new applications for the C-ZAM/SMASH using the existing range of Java or C DEVELOPMENT TOOLS without interfering with or even changing the existing applications running on the terminal. The code compilation functionality of the Java Virtual Machine has been used by Banksys engineers to guarantee security from the ground-up, whilst ensuring an open architecture allowing customers to develop their own applications for systems such as loyalty programs, credit points, customer profiling and many others. Furthermore, all the applications developed on the C-ZAM/SMASH can also run on the C-ZAM/SPIN (The Java unattended terminal)

The C-ZAM/SMASH is designed to work with a tele-load server, allowing simple and effective updates and maintenance of an entire network of terminals from a single Network Operations Centre.

## Modular design

The C-ZAM/SMASH is the most versatile terminal on the market and has been designed for use across the ever-expanding range of smart-card applications.



The PIN-pad can be used in isolation or with a range of peripherals and network interfaces including:

- **Printer**
- **Operator unit**
- **PSTN card**
- **ISDN card**
- **Ethernet card**
- **Ethernet router card**
- **RS 232 interface card**
- **GSM Card**

## The mobile solution

The C-ZAM/SMASH portable configuration guarantees power for over 100 transactions with a printed receipt without the need for a recharge.



The C-ZAM/SMASH portable configuration has a WAP browser allowing C-ZAM/SMASH to access to internet world : The WAP browser can interact with any WAP server serving WML pages.

The application uses the 4-line display and standard terminal keypad of the C-ZAM/SMASH terminal.

The C-ZAM/SMASH portable configuration includes a docking station which can charge the batteries in 4 hours. A cradle or car kit system is also available and will be connected directly to the cigar lighter or to a wall adapter.

# C-ZAM SMASH

## The technology of security

Banksys has built an international reputation on its commitment to security and the C-ZAM/SMASH is the leading-edge of security technology.

Featuring five internal chip readers and with the secure kernel of the Java Virtual Machine.

The C-ZAM/SMASH was designed from the ground-up with security in mind.

The open Java architecture allows applications to be developed on PCs using the C-ZAM toolbox of library functions and then ported to the uncrackable security modules before being rolled out into merchant outlets.

Encryption, screen-layout and chip-card commands are all included in the C-ZAM toolbox to give developers the tools they need to easily develop secure applications for every environment.



## Technical specifications of C-ZAM/SMASH options

### Printer

- thermo-graphic printer
- can be connected to base unit or operator unit

### PSTN modem

- V 32-bis (up to 14,4 kbaud), CTR 21, and FCC C8 approved

### Euro-ISDN adapter which supports

- ppp async/sync conversion over B channel
- X.25 over D and B channel

### RS232 card

### Ethernet card

providing TCP/IP connection over UTP LAN network

### Ethernet / Router card

an Ethernet card combined with a WAN access router

### Mobile Phone

dual band (900 Mhz/1800 Mhz) internal GSM modem

### Base station

- base unit battery charger
- second battery pack recharge
- battery: NiMH
- cradle: battery charger or car kit system - will be connected on 12V or 24V

## Technical specifications of the base unit

### 2 x 32-bit processors

- ARM security processor
- Intel application processor

### Memory

- 8 Mbytes of RAM
- 6 Mbytes of flash memory
- miniature card for extended data memory

### EMV 3.1.1

compatible chip card reader

### Magnetic stripe card reader

conforming to ISO 2 standard (ISO 2-3, 1-2)

### CSM (chip security module)

with 5 slots (4 x ID 0 + 1 x ID 1)

### External interfaces for

- printer
- electronic cash register (ECR)
- merchant unit
- barcode reader

### Led backlit graphic display

- (122 x 32 dots)

### Certificates

- CE
- EPCI
- EMV 3.1.1

### Dimensions

- 87 mm wide
- 172 mm long
- 67 mm high

### Weight

- 450 g with battery
- (375 g without battery)

### Software

- Java™ operating system by Sun Microsystems Inc.™
- Toolbox: a set of libraries which permit fast application development using Java™ and C languages.
- Secured uploading of software possible

