



SmartVend

Hybrid Parking



The SmartKit Hybrid reader can be installed in many pay and display or multi space parking machines.

Engineered specifically for parking machine applications, **SmartKit Hybrid (SKH)** payment terminal capitalizes on the modular design of QI Systems' Cash Card payment systems. Designed to integrate into Cale MP102 and MP104 parking machines, the **SKH** supports both magnetic stripe and chip card payment options. **SKH** can process the card payment transaction internally or it can pass card data to the host machine for other card processing options. Similar QI payment terminal configurations can be developed for nearly any target machine.

The **SKH** payment terminal consists of a QI SmartKit electronic purse single board computer assembled with a hybrid card reader chassis and a vandal-resistant metal bezel. For low power applications the **SKH** enters sleep mode between transactions and wakes itself and its host machine on card insertion.

The **SKH** terminal can support hardware and software SAM functionality for smart card processing and can maintain a detailed record of each transaction. It can be configured with one or more hardware SAMs. Chip card support includes ISO 7816 synchronous cards and asynchronous T=0 and T=1 formats. The terminal can concurrently support multiple stored value card schemes including the **QI Card Scheme**.

The typical configuration also supports the standard credit card ABA Track 2 mag stripe data format. Multiple track support and alternate data formats are available options. For some applications the terminal is programmed to process chip transactions internally but to pass the card data to the host machine for alternate processing of magnetic stripe transactions.

SmartKit Hybrid: A Versatile Investment

The **SKH** design makes installation simple, both in the field and on the factory floor. Machine programming, transaction data collections and other data transfers are performed with a PDA based handheld device. Online or offline, card transaction processing and data handling is achieved in a secure and convenient system.

SKH is part of the **SmartVend** family of modular cash card payment systems. Other devices sharing the same core payment module include vending machine kits and OEM kits for other unattended point of sale applications. Both reloadable cash cards and pre-paid disposable cards are offered. Card sales and reload can be automated with the **QI Card Value Center**. Using these **SmartVend** products the card payment system can be expanded to applications other than parking.



Benefits

SKH User Benefits

Convenience and Safety

- ☑ **Fast**, easy payment.
- ☑ **Eliminates** hassles with exact change.
- ☑ **More convenient** to carry cards than coins.
- ☑ **Avoids** coin-jams and filled coin-acceptors, which render machines inoperable.
- ☑ **Enhances** safety because customer carries less cash.
- ☑ **Enables** quality service to draw and keep satisfied customers.

SKH Operator Benefits: Reliability, Customer Service and Improved Revenue

- ☑ **Eliminates** coin handling costs and duties.
- ☑ **Installs** easily, it can be added to some parking kiosks in as little as five minutes.
- ☑ **Removes** the need to replace coin-acceptors following vandalism or currency changes.
- ☑ **Adds** pricing flexibility and loyalty program capability.
- ☑ **Increases Top Line Revenue** – Increased convenience and reduced downtime result in more customers and fewer no-pays.
- ☑ **Increases Bottom Line Revenue** –Reduced costs and cash shrinkage yields better bottom line performance.

Security Benefits

- ☑ **Accepts** only electronic payment. No cash is exposed to theft.
- ☑ Can **audit** all components.
- ☑ **Reduced** incentive for thieves and vandals to attack machines.
- ☑ **Vandal resistant** design.
- ☑ **Eliminates** the need for bill change machines, another prime target for thieves.

SKH Features, Specifications and Options:

✓	Supports ISO 7816 synchronous cards and both T=0 and T=1 asynchronous cards.
✓	Conforms to ISO 7810, 7811, 7812 and 7813. Supports ABA Track 2 format as standard. Multiple track support and alternate data formats are available options.
✓	Supports hardware (ID 000) and software SAMs and concurrent operation of multiple card schemes.
✓	Power: 12VDC. Draws 110 mA when active and 1.8 mA in standby. Typical active period is 50 seconds per transaction.
✓	Tolerant of heat, humidity, low temperatures,vibration and electrical fluctuations.
✓	Host machine interfaces are one RS485 port and one SPI port at TTL levels. RS232 is an available option.
✓	One output FET available for device (solenoid) drive. Limit 1 A at 12V.
✓	Transaction datastore capacity is 2000 to 3000 records depending on card scheme data requirements. Removable backup datastore is an available option.
✓	Revenue reports and transaction data upload are done via the smart-card port and QLink® software on a PDA computer.
✓	Used extensively in Cale MP102, MP104 and MPC 104 models. Can be configured for other machines.
✓	Physically and electrically compatible with above Cale models for OEM or retrofit installation.
✓	Compact terminal: the entire package with bezel requires only 200 x 100 x 75mm.
✓	If desired, the SKH single board computer can be separated from the chassis and mounted up to 300mm distant, connected by a single ribbon cable.

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