

SAC10K

SECURITY ACCESS CONTROLLER

Higher speed processor at and affordable price, IBS new access controller is known as SAC10K. The SAC10K controller is an IP-based controller that is built with a high-speed processor of 1.2GHz and Ethernet port that shall accommodate various access operations smoothly and efficiently. Another desirable feature that makes SAC10K a 'must-have' access controller is the HD pinhole camera for added security features.

SAC10K comes in two major parts:- Main Control Panel (MCP) and User Control Panel (UCP). MCP processes the entire card access operation algorithms and the UCP provides the interface to cardholders such as the Smart Card Reader, LCD, Keypad, LED Indicator (Red & Green) and Buzzer.

SAC10K UCP comes in 4 variations; SAC10K-A (A1 & A2), SAC10K-B, SAC10K-C, and SAC10K-D.



ITEM	DESCRIPTION	
Controller model	SAC10K	
Microprocessor	SOC with 64-bit quad-core ARM Cortex-A53 processor	
Operating System	Raspbian OS	
Operating frequency	1.2GHz	
Program/Data memory	<ul style="list-style-type: none"> 1GB RAM Up to 32GB microSD/SD Card 	
Communication port	<ul style="list-style-type: none"> 1 x 10/100 Based-T Ethernet 4 x high speed USB 2.0 1x serial interface 	
Communication cable type	Recommended UTP Cat 5e	
Max length of communication	100m (UTP Cat 5e)	
Controller I/O	<ul style="list-style-type: none"> 1 Door Sensor 1 Exit Button 1 Locking output (EM lock, door strike or etc.) 	<ul style="list-style-type: none"> 1 Alarm output (siren/strobe light, etc) 7 programmable digital inputs/ outputs
Display	16 x 2 Liquid Crystal Display with backlight	
Keypad	4 x 4 Programmable Keypad	
Battery backup	1 x 7AH Rechargeable Lead Acid Battery (to support system for 3hrs)	
Sound indicator	<ul style="list-style-type: none"> 1 Onboard Buzzer 1 Siren with strobe light(optional) 	
Watchdog/Supervisor	Onboard Supervisory Watchdog using MAX705	
EMI Reduction	Spectrum spreader for reduced EMI (radiated emissions)	
Casing and enclosure	<ul style="list-style-type: none"> 1mm mild steel casing with powder coated 2mm ABS-PC (polycarbonate), Fiber reinforced with UV Protection 	
Power	12VDC and 5VDC Operating Voltage	
Operating temperature	0°C to 70°C	
Humidity	10% to 90%, non-condensing	
Connector	<ul style="list-style-type: none"> 1 x RJ45 Socket 4 x USB Socket 1 x microSD /SD Card Socket 1 x 40 GPIO pin Header 	<ul style="list-style-type: none"> 1 x HDMI Output Display 1 x 15-pin MIPI Camera Serial Interface (CSI-2)
Size and dimension	<ul style="list-style-type: none"> MCP - (H) 120mm x (W) 140mm x (D) 24.5mm UCP - 287mm (L) x 308mm (W) x 76mm (H) 	
Remote & poll controller via web server	<ul style="list-style-type: none"> IP Address Configuration ID Configuration Time Synchronization Output Activation 	<ul style="list-style-type: none"> Reset Controller View Transaction or Card ID Poll the Controller Health Status Poll the Status of Controller I/O

For further information, please contact:

Key Features:-

Card Reader Interface

- Mifare Smartcard Reader
- LEGIC Smartcard Reader
- Desfire Reader
- iCLASS SE Reader
- NFC Reader
- RFID Reader

High number of Off-line Transactions

Supports up to 200,000 off-line transactions including Registered & Unregistered Card Access, Time Recorder Terminal Access, and Duress Entrance.

Anti-pass back feature

- Global Anti-pass back
- Local Anti-pass back
- Forgive Anti-pass back

High security

- Door Force Open
- Duress Entrance
- Door Ajar

Up to 255 Time Zone Group with 5 time set per each

Variations

- SAC10K-A1: Reader In with Keypad & LCD
- SAC10K-A2: Reader In without Keypad & LCD
- SAC10K-B: Biometric with Reader, Keypad & LCD
- SAC10K-C: SAC10K-A1, A2 and B coupled with Pinhole Camera at Reader In
- SAC10K-D: SAC10K-A1, A2, B and C with in-built Desfire Reader

High number of Card Holders

- Up to 60,000 cardholders (read only) and unlimited cardholders (read/write) for Mifare & LEGIC
- Up to 60,000 cardholders for Desfire/iCLASS SE/RFID card

Huge amount of Blacklist ID

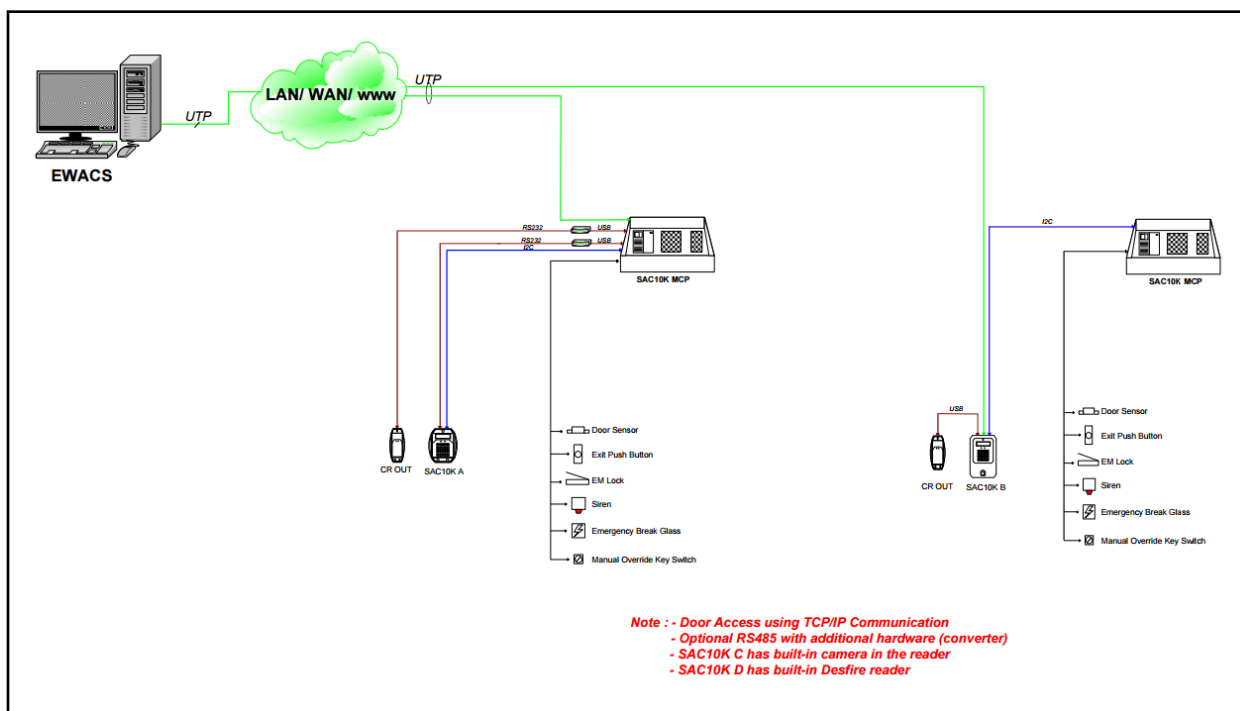
Able to store 20,000 blacklist ID (expandable up to 40,000 blacklist ID)

Configurable multimode operation

- Card only
- Pin only
- Card and PIN

Low battery indicator

SYSTEM DIAGRAM



HIGH SPEED PROCESSING

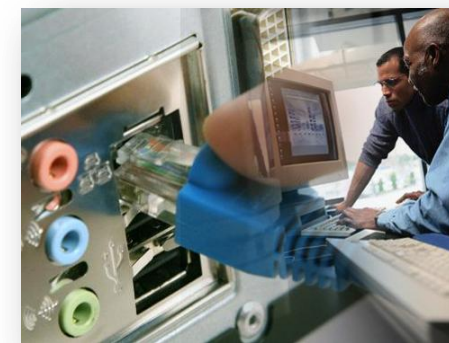


The new SAC10K is designed to be a powerful controller with advanced high speed processor that is capable to handle high-volume and high traffic access operations.

With the 1.2GHz processing power and large memory capacity of 1GB LPDDR2, the SAC10K is able to provide smooth control and monitoring mechanisms for card and door operation suitable for the buildings, warehouses and factories. If the 1GB memory is not sufficient, user can add up to 32GB microSD/SD Card.

The controller has its own operating system so it can be remotely accessed through a network. The SAC10K is built with Ethernet port and can be connected to EWACS via Ethernet.

EASY REMOTE CONFIGURATION



The SAC10K is a seamless yet affordable controller that enables local and remote configurations. It offers easier way to configure the card access operation without accessing the server but only through keypad and LCD provided locally.

However, the UCP of the SAC10K can be accessed remotely without having to access the centralize monitoring and control system like EWACS. This feature allows for easy and fast troubleshooting of any controller problem thus reducing the cost of manpower and logistics. It also allow for fast configurations to be done remotely.

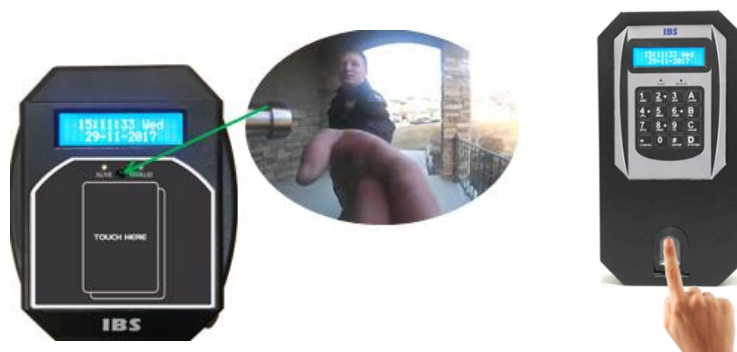
Remote configuration on the SAC10K includes card operation, PIN mode configuration, door operation, and general configuration such as password change and time/date setting.

ENHANCED SECURITY FEATURES

The SAC10K offers extensive security feature for user and one of its core functionality is to secure and control doors. Each user will have to touch an authorized card to the SAC10K UCP in order to access in. The SAC10K detects if there are abnormalities in door operation such as Door Force Open, Duress Entrance, and Door Ajar. These abnormal operations will trigger alert that will be automatically sent to the Enterprise Web-based Access Control, Attendance, Alarm Handling, Automation Control and Security System (EWACS) for further action.

The SAC10K is available with a variation that allows the capture of an image when an event transaction is detected. This type of SAC10K UCP has a built-in pinhole camera that provides a High-Definition resolution for clearer view. The pinhole camera provides image snapshot features as described above; or watch a 'live' view surveillance from EWACS. The SAC10K is also available with fingerprint biometric access.

There is also another variant with Desfire reader type. For some organization, Desfire is chosen for its on-chip backup management system and the mutual three pass authentication. Its another winning features is the automatic anti-tear mechanism that is available for all file types, which guarantees transaction oriented data integrity



WIDE VARIETY OF INTERFACES



Apart from the Our SAC10K has the capability to be integrated with multiple components such as access reader out, door sensor, siren, exit push button, tamper switch, and many others.

It comes with a built-in tamper input whereby any effort to tamper with the controller will be detected by the unit itself or remotely. Moreover, the SAC10K is able to produce alarm sound when security has been breached.