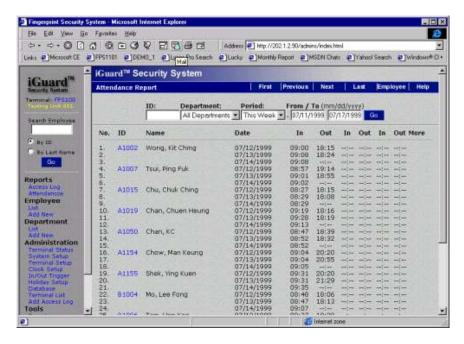## Built-in Web Server

The built-in Web Server enables all the computers in the corporate network to directly & simultaneously access the device using any Internet Browser, such as Microsoft Internet Explorer, Firefox & Chrome on Apple Macintosh, Microsoft Windows & Linux based PC. No additional software is required.

So whether you are in an airport lounge or a hotel room, you can always check if your employees are already in the office or not, and you can even control, modify or disable their access rights to your office remotely via internet connection.

Built-in Database Server

The built-in Database Server allows obtaining the employee information and the access & attendance records easily, thus cutting the processing time for jobs like payroll calculation from days to minutes. All the information is real-time information, instead of week-old or day-old data. In contrast, other systems must use dedicated computers running special proprietary software to retrieve the information, and usually dedicated persons are required to perform the jobs.

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True TCP/IP Based Communication

iGuard is the first and the only security product in the market that uses true TCP/IP as the protocol to communicate with other iGuards and the outside world. The protocol enables the device to directly connect to the corporate network via the existing cable wiring.

Unlike traditional RS-485/Wiegands with maximum 32 units communicated at the same time. True TCP/IP is fast, unlimited and ubiquitous.

- Advantages:
- No planning diagram is needed.(Technically, TCP/IP network planning diagram is independent of the location of True TCP/IP based devices)
- Simply plug & play
- Scalable and limited by IPv4 (~ 4 billion)
- Fast and Reliable
- run on local network and Internet

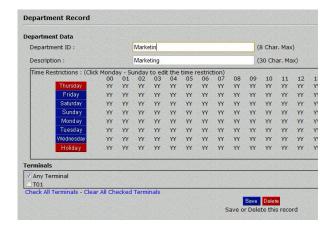## Master/Slave Networking with "True TCP/IP" based

Mulitple iGuard units can be setup as a Master/Slave network in local network or Internet. Under this configuration, one iGuard would be assigned as the Master, and all other units are configured as slaves. User enrolment can be done once in any unit as users information and access right are replicated over the Master/Slave network.

Technically, there is no limit on the number of units on a Master/Slave network which in big contrast to RS-485 with only 32 units for each RS-485 controller.
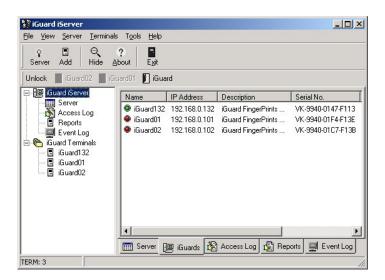
Access Rights

When you can easily and conveniently assign different access rights to your employees, you can plan your security better and maximize the effectiveness of the human resources . And with the built-in Web Server technology, iGuard empowers you to manage the access rights of each individual employees or a group of employees easily anytime, anywhere using any web-enabled computers or mobile devices. For example, you can assign the staff members of the marketing department the rights to get in the office premises during weekdays from nine to five only, or prevent a particular employee from entering the computer server room.
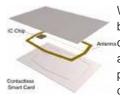

Reports

iGuard includes three built-in reports: Access Log, Attendance Report & Daily In/Out report, that can be accessed via any web-enabled computer with web browser. Should more sophisticated reports be required, such as for the payroll purposes, the information can be downloaded and saved in Microsoft Excel format and in plain text format.

In addition, the access records can be saved in any PC in the network in the popular ODBC database format in real-time manner, and other applications can conveniently obtain the information from the ODBC (the required software, iServer2.exe, is available free-of-charge in our download page).

Contactless Smart Card
NXP Mifare Classic Contactless Smart Card

 With this feature, your workforce can gain access to the iGuard faster and smarter, by using the Contactless Smart Card. Each user would have his / her own smart card, which stores the user information including the name, company & branch code, and the fingerprint information. This feature is specially useful during high-traffic period, such as during the beginning and the end of the day, that most employees clock in and out for the day at almost the same time.

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Lucky Technology is the first company to store fingerprint templates on contactless smart card.

Fingerprint Sensors
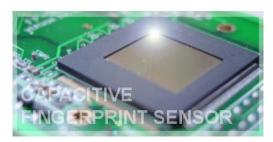
LM520-FOSC Durable Optical Sensor

It uses next-generation fingerprint technology including SecuGen ruggedized, high image quality fingerprint optic module and high speed fingerprint matching algorithms.

LM520-FSC Sensitive Capacitive Sensor

It uses the advanced Solid-state, silicon-based Capacitive Fingerprint Sensor.

This sensor features enhanced imaging capabilities, electrostatic discharge performance and improved ruggedness to provide superior levels of accuracy and reliability for fingerprint authentication.

When a finger contacts the iGuard sensor surface, the sensor measures the capacitance at each pixel in the 256 300 array in the sensor surface. Differences in capacitance correspond to the ridges, valleys and pores that characterize a unique fingerprint.

This sensor eliminates the limitations of other traditional scanners, including edge distortion, low-image resolution, scratched platens, mis-aligned optics and bulky size. It is also unaffected by day to day fingerprint variations such as cuts, swelling & dirts

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Technical Specification

	SC / FSC / FOSC	SuperMaster
Power	12VDC, 600mA	12VDC, 800mA
Fingerprint Sensor	n/a / Capacitive / Optical	n/a
Contactless Smart Card reader & writer (built-in)	Yes	n/a
Web and Database Server	Built-in	
Network Security (SSL)	Optional	
Auto Data Synchronization (i.e., master / slave configuration)	Yes	
Maximum Transaction Records stored	10,000	20,000
Static / Dynamic IP Assignment	Yes (Support existing DHCP Server)	
Non-volatile memory	16MB	32MB
Computer Supported (with Internet Browser)	Macintosh, Windows 95/98/NT/ME/XP, Linux and Unix Machine	
Valid Characters for Employee ID	0-9, A-B (maximum - 10 characters)	
Display	16 x 2 LCD with Backlight	16 x 2 LCD with Backlight
LCD Multi-Lingual	Yes	Yes
Two Finger Enrollment	Yes	
Fingerprint Sensor Type	n/a / Capacitive / Optical	n/a
Fingerprint Sensor Resolution	500dpi	n/a
Fingerprint Sensor scan area (mm)	12 x 15	n/a
Image Capture Time	< 1 sec.	n/a
Verification Time	< 1 sec.	n/a
False Rejection Rate	< 1 %	n/a
False Acceptance Rate	< 0.01%	n/a
Automatch Count	30	n/a
Network Protocol	TCP/IP, HTTP	
Network Interface	Ethernet (10-Base T)	Ethernet (100-Base T)
Other Interface	Wiegand (Output Only)	
Real Time Clock	Last for approx. 2 days without power	
External Controls	Door Strike Open-Door Switch Break-in Alarm Door Status	n/a
Dimemsion (mm)	SC/FSC:105(W) x 38(D) x 150(H) FOSC: 105(W) x 55(D) x 150(H)	254(W) x 193(D) x 61(H)
Certification	CE FC	Pending