

CASTLE®

TOTAL SECURITY SOLUTION



PRO-NDT



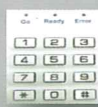
Fingerprint



Network



Card



PIN



Time attendance

CASTLE® presents you its latest Access Control System - SCAN-X. The SCAN-X is robust in appearance and is embedded with the cap-sensing technology sensor. With this, the safety has gone up and therefore, you worry less about intruders.

Multi-Door Access System

Since 1995, our brand name Castle® and our security solutions trusted by million of users globally. We had successful penetrate over 30 country accoss Asia, Middle East, Africa and many more. There are thousands of Castle's systems used by the banking industry, corporate industry, academic, government, hospital and commercial clients.

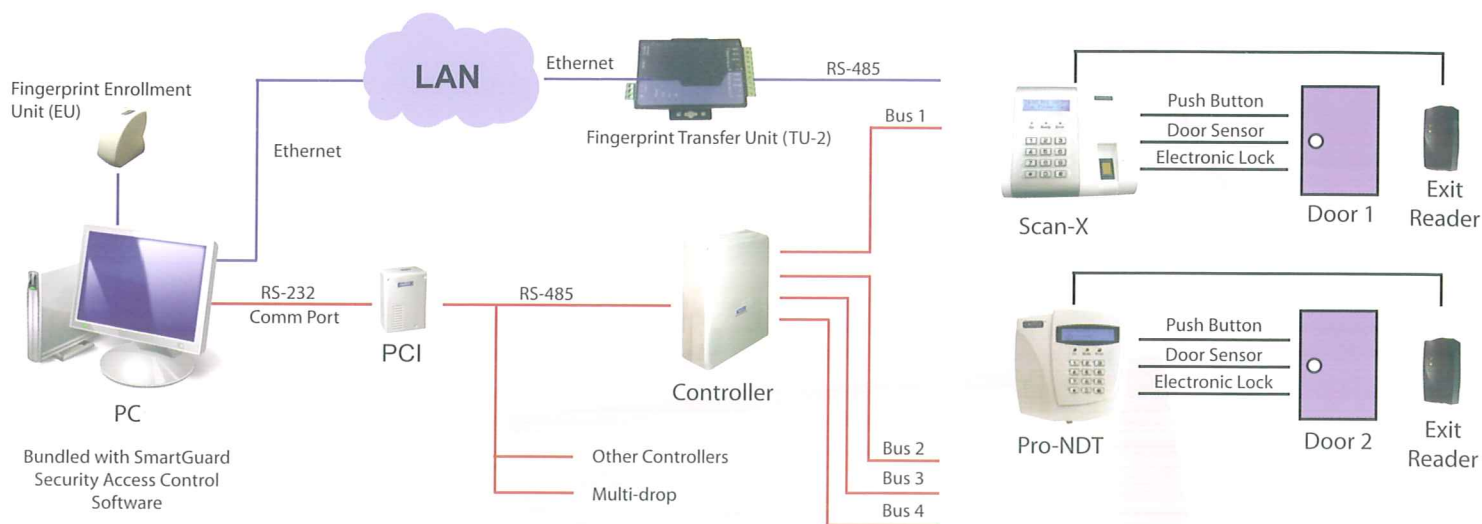
Castle® R&D continuously keep to world's security needs and constantly developing innovative software and hardware, that use to track and identify people through biometric or cards access readers.



CERT: 403756



SYSTEM CONFIGURATION

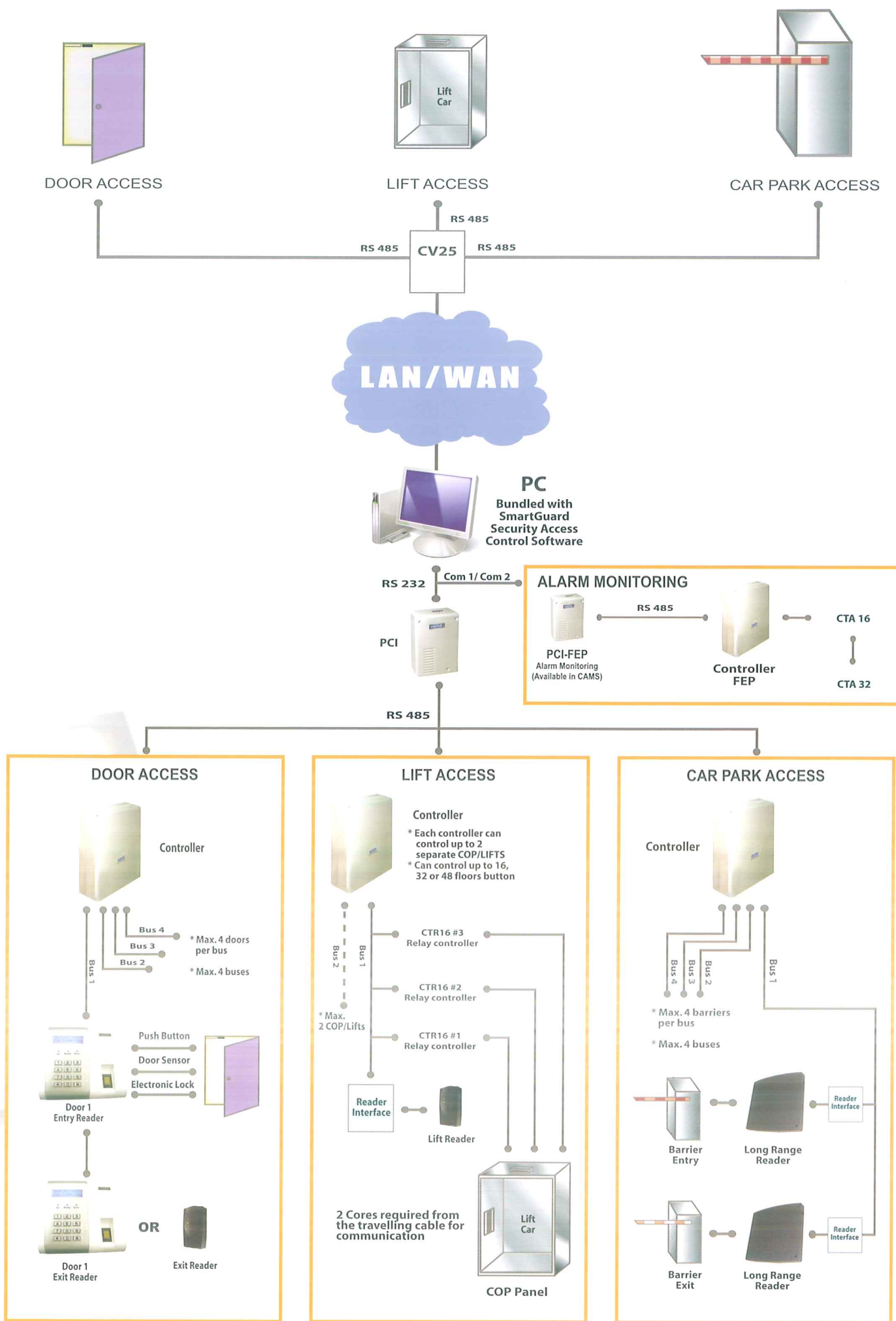


TECHNICAL SPECIFICATION

CONTROLLER

Microprocessor Models	Philips PXA 8051
Operating Frequency	24 MHz
Clock System	Real-time clock
EPROM/ Flash	128K Bytes
RAM	1 M Bytes
Watchdog	1 Internal and 1 external
Battery Back-up for Memory	3.6V onboard rechargeable backup battery
Type of Storage System Used	Static RAM
Operating Temperature Range	0-65 °C
Baud Rate	9600 (Controller to reader), 2400 (PC to controller)
Controller Display Unit	20 Characters x 2 rows liquid crystal display with back-light
Maximum Card Storage Capacity	10,000 cards user and 30,000 transactions
Communication Cable Used	1 Pair RS-485 from reader to controller for each bus 1 Pair RS-485 from controller to PCI 1 Pair RS-485 from reader to fingerprint transfer unit (Optional for Fingerprint System Only)
Maximum Length of Communication	1 KM (cable length)
Recommended Cable Type	RS485 shielded twisted pair (Belden 1419A)
Input Voltage	12V DC
Input Voltage Tolerance	11V-13.8 V DC
Rated Current Input	1A
Number of Controllers Supported	16 or 32 Controllers (depends on software version)
Number of Readers Supported	16 Doors 32 Readers (depends on controller types)
Reader Supported	-HID, Proximity, Contact-Less & Smart Card -Fingerprint (Capacitive Sensor)
Reader Format Supported	-Magnetic signal -Wiegand 26 bits
Operation Mode	Card, PIN only, Finger(Scan-X only), Card+Finger (Scan-X only)
Fingerprint Matching Only	1 : 1000
Maximum Fingerprint Templates Storage Capacity (per reader only)	3000
Controller Housing	ABS casing
Time Sets	256 time sets (3 intervals per zone)
Time Zone	256 time zone (7 days +2 Holidays per zone)
User Accessibility	256 set
Support Multi-Door and Anti-pass Back	Yes
Holidays	60 dates programmable holiday
Controller Programming Mode Security	3 Level of Passwords: Diagnostic, Alarm & Programming
Diagnostic Systems	Yes
Programming Mode	Menu driven programming & software programming
Fire Alarm Input	Yes
Relay Output	-Auxiliary Relay Output (20 type programmable events) -General Purpose Output (Time Zone Control Output)


INTEGRATED ACCESS CONTROL SYSTEM









* RS 485 cable distance 1 km (max).

ORDERING INFORMATION

RECOMMENDED ACCESSORIES

CONTROLLER	STOCK CODE	DESCRIPTION	STOCK CODE	DESCRIPTION
 291H x 194W x 81D mm	CAS-2S	2 doors controller	Platinum kit	3A/ 13.8Vdc power supply unit with battery charger
	CAS-4S	4 doors controller	600LB	12Vdc, 600lbs electric magnetic lock
	CAS-8S	8 doors controller	Bat7	7AH sealed lead acid rechargeable battery
	CAS-12S	12 doors controller	Communication	Belden RS 485 cable
	CAS-16S	16 doors controller	Cable	Emergency break glass/ Magnetic contact
			EBG / MSC	

READER	STOCK CODE	DESCRIPTION
 154H x 168W x 39D mm	SCAN-X	Fingerprint reader c/w 12 keys polycarbonate keypad, reader interface unit, ABS casing with blue LCD & with capacitive fingerprint sensor. (Format: Wiegand 26 bits)
	SCAN-IC	Fingerprint contact-less smart card reader (Mifare card serial number) c/w 12 keys polycarbonate keypad, reader interface unit, ABS casing with blue LCD & with capacitive fingerprint sensor. (Format: Wiegand 26 bits)
 174H x 167W x 38D mm	PRO-NDT	Proximity reader c/w 12 keys polycarbonate keypad, reader interface unit & ABS casing with blue LCD (Format: Magnetic signal)
	PRO-NDH	HID proximity reader c/w 12 keys polycarbonate keypad, reader interface unit & ABS casing with blue LCD (Format: Wiegand 26 bits)
	CAS-IC	Contact-less smart card reader (Mifare card serial number) c/w 12 keys polycarbonate keypad, reader interface unit & ABS casing with blue LCD (Format: Magnetic Signal)

OTHER COMPONENTS	STOCK CODE	DESCRIPTION
PCI  174H x 167W x 38D mm	PCI-STD	PC-interface unit c/w SmartGuard Standard software. 16 controllers version. Able to manage door/ car park access.
	PCI-PRO/ PCI-PRO2	PC-interface unit c/w SmartGuard Pro software. 16/32 controller version. Able to manage door/ lift/ car park access.
CV2588  226H x 151W x 50D mm	PCI-PRORM	PC-interface unit c/w SmartGuard Pro Remote multiple site monitoring software. 16 controller version. Able to manage door/ lift/ car park access.
	PCI-RMAGN	PC-interface unit c/w remote program data collector.
	PCI-C/S-1A	PC-interface unit c/w Smart Guard Client-Server software. 16 controllers version. Able to manage door/ lift/ car park access.
TRANSFER UNIT 	PCI-C/S-2A	PC-interface unit c/w Smart Guard Client-Server software. 32 controllers version. Able to manage door/ lift/ car park access.
	PCI-C/S-RM1A	PC-interface unit c/w Smart Guard Client-Server Remote software. 16 controllers version. Able to manage door/ lift/ car park access.
ENROLMENT UNIT  USB COM	CAS-OCX	PC-interface unit c/w Software development kit to communicate with CASTLE® S-Series controller.
	CV2588	RS 485 to LAN converter. (UTP Ethernet 10 base T with TCP/IP protocol)
	USB COM	USB to COM port converter.
	EU	Fingerprint enrollment unit
	TU-2	RS 485 to LAN Converter. (Fingerprint Transfer Unit)

* Specification subject to change without prior notice

SmartGuard Standard comes with the entire standard feature which is sufficient for managing CASTLE access control systems and built-in simple daily Time Attendance reporting.

SmartGuard Pro comes with all the features found in SmartGuard Standard version plus many enhanced features such as record, edit and generate time attendance reports, as well as personalization, manages lift access controller and etc.

SmartGuard Pro-Remote can monitor and control up to a maximum of 256 doors. The controlling can also be done on the controller itself. The users can remotely perform a wide range of supervisory, control and monitoring function centrally for one computer, hence simplifying the jobs of the system administration. All the controllers are linked to the PC where the software resides in. SmartGuard Agent acts as gateway between the SmartGuard Pro Remote and the Remote controller. It communicates with SmartGuard Pro Remote through TCP/IP and CASTLE Controller through comm port (RS485).

SmartGuard Client-Server networking capabilities. Software user can perform the entire normal task on the remote PC just like on the same PC. Therefore, software user can remotely monitor, change and even generate reports without having to go to the PC where the controller is attached. In addition, it allows up to 3 software users to access the system at the same time. The networking system is based on the Windows Socket Communication Systems. The software package bundled with database server, a communication server and the client software at a very cost-effective price for implementing such system.