



PowerVision™ Enterprise Release 3

TCU 8000i Terminal Control Unit



- ▶ Door access control
- ▶ Lift access or lift call control
- ▶ Vehicle boom gate access control
- ▶ Time attendance & management
- ▶ Visitor management
- ▶ Intrusion alarm monitoring
- ▶ Guard tour monitoring
- ▶ Lighting & utilities control
- ▶ Facility booking control
- ▶ Audio-visual alert in absence of AC source

Overview

The new compact TCU 8000i is a universal, intelligent terminal control unit suitable for multiple applications, particularly building security and control systems.

As a basic building block for the PowerVision™ Enterprise Security Management System, it also supports a range of hardware modules, making it a flexible and powerful platform.

Consisting of a CPU board, a lightning protection board, a regulated power supply unit, an AC/DC power converter board, an AC line filter, and a circuit breaker, there remains enough space within the key-locked enclosure to mount either an 8-channel input board (PCA-22024A), or an 8-channel I/O board (PCA-22033).

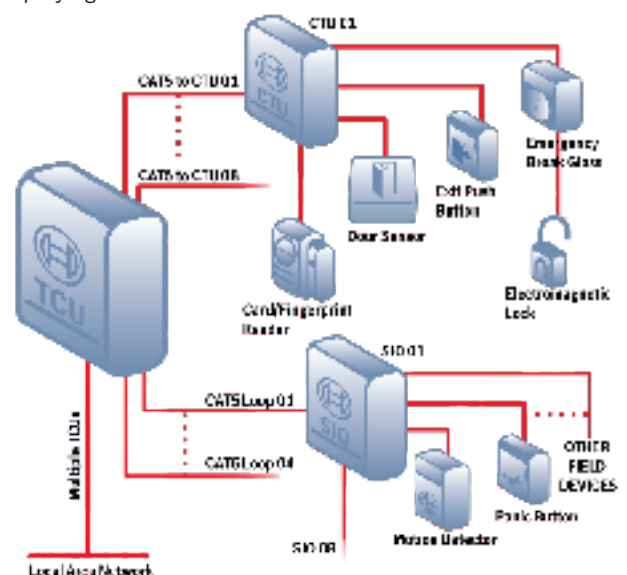
The CPU board contains a microprocessor, RAM memory, and all the necessary communications ports to interface with external Network Interface Units (NIUs), card reader controller units, and remote I/O units.

The enclosure is also equipped with a tamper switch that detects unwarranted intrusion, while an audio-visual alarm sounds in the absence of an AC source.

Configuration

Each TCU 8000i unit can support up to a maximum of 16 card readers (8 doors), and 64 input and output points via various types of I/O boards. Depending on application requirements, multiple TCU 8000i units can be connected in a cluster to NIU-4 or NIU-5, and to the central supervisory computers.

In applications involving smart-cards and smart-card readers, the CPU board requires an optional built-in interface to a Secure Access Module (SAM) board to facilitate secured authentication between the smart-cards and the CPU. This offers extra security, and maximises investment for systems employing smart-cards.



Features

Application Support

PowerVision™ Enterprise Release 3 – refer to catalogue for more details

System Parameters

256 access groups
256 schedules, each with 4 intervals and holidays
Full Anti-Passback (APB) capabilities (timed, soft and hard)
Max 64 input points (optional external hardware)
Max 64 relay output points (optional external hardware)
Ability to work in Off-Line Mode

Card Access Parameters

20,000 cardholder capacity
Card function type: Normal, Time Attendance, Arm/Disarm, Guard Tour, Control
Operation modes: Card-only, PIN only, Card + PIN
Selectable PIN per card (4-8 digits)
Card add/delete feature
Card + PIN to arm/disarm Alarm Function
Dual-card access function (2-man rule)
Card with time/date activation and expiration function
Card control function to trigger up to a combination of 32 input and/or output points

Door Parameters

Auto lock/unlock by schedule
Locking/unlocking of doors by card reader control
Door strike control: 3-255 sec
Door left open alarm: 1-255 sec

Alarm Parameters

Door held open/forced open alarm
Duress alarm (from keypad readers)
Intrusion alarm (instant or delayed)
Alarm monitoring
Fire alarm input triggering
Tamper alarm for enclosure
Arm/disarm via keypad, card reader, central computer, schedule

I/O Parameters

Flexible programmable logic of all input and outputs points through Addressable Control Unit (ACU) functional blocks

Hardware Specifications

CPU Board

Embedded microprocessor board
Hardware real-time-clock with battery backup

Communication Board

1 x 10mb/s ethernet connectivity
1 x RS 232 serial port (configured for LAN support)
1 x RS 422 port (for interfacing to other TCU-8000Ps)
8 x CRC port (to interface with card reader controller units)
4 x IOU port (to interface with remote IOU units)
2 x IDE bus connector (to interface with local bus I/O boards)

General

Input supply: 100-240VAC, 50/60 Hz (auto switching)
Battery backup: 12VDC, 7AH (Optional)
Battery charging: on-line charging
Backup period: minimum 4 hours
Power consumption: 1.6W (idle) to 30.4W (full load)
Supports up to 16 card readers (8 doors)
Optional inputs: maximum of 64
Optional outputs: maximum of 64

Mechanical Specifications

Dimensions: H406mm x W406mm x D90mm
Enclosure Material: Mild Steel, powder-coated spraypaint
Weight: 7.5kg
Colour: Grey

Operating Environment

Operating temperature: 0°-50°C (32°-120°F)
Humidity: 10%-90% non-condensing

Ordering Information

Model | Description

ADC-25544 | Terminal Control Unit – TCU 8000i
Intelligent Controller for S Series Reader, for Secured Mifare/HID/EM Card Scheme

The product also supports multi-technology cards/schemes. Please specify details when ordering.

Product Selection Matrix

Hardware Selection Matrix		S Series Readers (Card Scheme)			External Reader
		Mifare (Secured)	HID	EM	HID / EM Prox
Terminal Control Unit TCU 8000i		ADC-25544	ADC-25544	ADC-25544	ADC-25544
Cable Terminal Unit (CTU)		ADC-23091	ADC-23091	ADC-23091	ADC-23484
Serial I/O Unit (SIO)		ADC-22039	ADC-22039	ADC-22039	ADC-22039
Reader Model	Entry	LCD+KEYPAD ADC-25379	ADC-23479	ADC-23482	
	Fingerprint	ADC-25415			
	IFDs	ADC-25382	ADC-23480	ADC-23483	
	Finerprint	ADC-25417			

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