

## KT-400

### Powerful, Ethernet-Ready Four-Door Controller

#### Features That Make a Difference:

- Secure 128-bit AES encryption solution
- 100,000 cards and 20,000 stored events in stand-alone mode
- Ethernet port for easy connectivity
- Data integration with DSC PowerSeries and MAXSYS intrusion alarm panels
- Double and triple swipe card at reader to activate relay, arm alarm system, lock/ unlock doors and more



#### **Ethernet-Ready Encrypted 4-Door Controller**

The KT-400 four-door controller is a secure and easy-to-use networked access control solution. The KT-400 has an on-board Ethernet port that connects to existing network infrastructure and leverages the benefits of IP-based systems. Combine KT-400 with EntraPass security management software to create a highly scalable solution that can be deployed within one building or across multiple locations. The system easily scales from controlling four doors to a million doors and managing millions of cards at multiple locations.

#### **Built-In Expansion**

The KT-400 allows connection to expansion modules in order to add inputs or to add outputs such as relays and drain outputs. Combining input and output expansion modules provides the flexibility to connect up to 256 inputs and 256 outputs.

#### **Status Indicators**

LEDs provide important controller status and diagnostic information. The KT-400 has multiple LED status indicators for: troubleshooting, network activity, power status and outputs activity.

#### **Easy Network Connectivity**

The auto-sensing 10/100Base-T onboard Ethernet port automatically selects compatible Ethernet speeds to provide faster network connectivity. It eliminates the need to purchase an external Ethernet device, saving time and money. The KT-400 uses secure 128-bit AES encryption to communicate with the Gateway.

# Features

## Removable Terminal Blocks

In order to expedite installation and facilitate serviceability, KT-400 features removable terminal blocks that are simple to connect and are color-coded for quick identification.

## Built-in Web Configuration

The web configuration page is accessible through any browser. It can be used to verify and configure the IP settings of the KT-400. For enhanced security, once the KT-400 is configured, the web configuration page can no longer be accessed. The KT-400 can be reset to factory default in the case of a configuration error and the web configuration page will once again be accessible.

## Occupancy Level Controls

KT-400 supports occupancy restrictions for four local areas at the controller level with the anti-passback feature. This feature allows the operator to define a particular area that may have capacity limitations, such as an auditorium, conference room, or laboratory. The KT-400 can be configured to limit the amount of people permitted into this area. Once the limit has been reached, no additional personnel will be allowed to enter the defined location. This prevents overcrowding or violation of capacity regulations.

## Low Bandwidth Consumption

The EntraPass software monitors events occurring at the doors by polling the KT-400 door controllers. The EntraPass Multi-Site Gateway only communicates with the KT-400 if an event has occurred. Communication integrity is ensured through a heartbeat signal which is sent at regular intervals to the EntraPass system. This asynchronous communication significantly reduces the amount of bandwidth required to manage the access control system over the network. If there is a communication failure between EntraPass and the KT-400, an alarm will be triggered in the EntraPass system.

## Supervised Lock Power

There are 4 supervised door lock outputs with an internal power supply (12 VDC). In addition, an external power supply (12 VDC – 24 VDC) may also be used to provide power to the lock outputs. This eliminates the need for additional relays. The lock outputs will still be supervised by the KT-400.

## Multiple Communication Ports

KT-400 provides multiple controller configurations to suit your specific access control needs. These configurations provide communication with the EntraPass Gateway. You can choose any of the following options:

- IP (Ethernet)
- RS-485 (COM1) using a USB to RS-485 converter
- RS-232 (COM3) for direct connection

## Configurable Reader Outputs

There are 4 different possible outputs for each of the 4 onboard reader interfaces for a total of 16 programmable outputs. Reader outputs are used to provide the user with visual (LEDs) and/or audible (buzzer) feedback on access control events.

## End-of-Line Resistors

The KT-400 has an onboard capability of monitoring 16 input zones (expandable to maximum 256 zones with the addition of expansion modules). It can support a maximum of 128 inputs using double end-of-line (EOL) resistors or 256 inputs using none or single EOL resistors. This allows the system to monitor more states associated with a customer's installation, significantly increasing the level of security.

## Alarm Panel Integration

DSC PowerSeries or MAXSYS alarm panel data integration can be accomplished by connecting it to the KT-400 controller. Using the KT-400; EntraPass Special, Corporate or Global Editions are able to receive intrusion events, view the status of zones and partitions, and program users' code. In addition the system can be armed/disarmed (single or multiple partitions) via the reader or manual operation from the workstation.

## Elevator Interface

The KT-400 Ethernet Four-Door Controller supports elevator interfacing with the addition of expansion modules such as the KT-MOD-REL8, KT-MOD-INP16 and KT-MOD-OUT16.

## Physical

### Cabinet Dimensions

(H x W x D) . . . . .	37.6 x 30.5 x 12.6 cm (14.8 x 12.0 x 4.95 in)
PCB Dimensions . . . . .	23.1 x 14.0 x 3.4 cm (9.1 x 5.5 x 1.3 in)
Cabinet Weight . . . . .	4.0 kg (8.8 lb)

## Environmental

Operating Temperature . . .	2° to 49° C (35° to 120° F); indoor use only
Humidity Level . . . . .	Maximum 85% relative humidity non-condensing

## Electrical

### Power Input

KT-400 . . . . .	16.5 VAC or 24 VAC, 75 VA, Class 2 transformer
Battery Backup . . . . .	12 VDC/ 7 or 12 Ah battery supervised; up to 12 hours of operation
Reader Power Output . . . .	Maximum 1.0A @ 5 VDC or 12 VDC, typical 250mA per reader, protected and supervised

## Operational

Reader Types . . . . .	Wiegand, proximity, ABA clock and data, bar code, magnetic, integrated keypad, smart card
Monitored Points (Inputs) . .	16 monitored points, single EOL, double EOL
Points Maximum Wiring . . .	AWG #22 – 600 m (2,000 ft)
Door Strike Power . . . . .	12VDC, maximum 2.0A, typical 500mA per lock, supervised
External Lock Power . . . . .	12 or 24 VDC (up to 28 VDC) supply up to 750 mA per lock for a total of 3 amp
Reader Outputs . . . . .	16 outputs, 25 mA maximum each, open collector outputs
Auxiliary Outputs . . . . .	LEDs (door 1, door 2, door 3, door 4, LED, OUT1 and OUT2) and buzzers (Buz,door 1, door 2, door 3, door 4) 25 mA each, open collector outputs
Controlled Output Relay . . .	Four onboard Form C controlled outputs relay, 30 VDC, 3 amp max each
Communication Ports . . . .	RS-232 with RJ-12, RS-485, Ethernet 10/100Base-T with RJ-45
Expansion Port . . . . .	SPI 6-pin connector, bi-directional data exchange supported. Supplies 12 VDC, 500 mA maximum shared with 12 VDC auxiliary port
Auxiliary Port . . . . .	Auxiliary 12 VDC, 500 mA maximum shared SPI expansion port
Communication Speed . . . .	Up to 115,200 baud (automatic detection over RS-232 and RS-485); 10/100Base-T over Ethernet
Flash Memory . . . . .	256 MB for application and data storage (configuration and events can reside for a minimum of 10 years without power)
RAM . . . . .	128 MB for application loading and running
Network Autonomy . . . . .	Distributed data and processing

## Regulatory

EN61000-6-1, EN61000-6-2, EN55022, EN60950  
FCC Class B  
UL-294, UL-1076  
RoHS  
WEEE  
CE

## Model Numbers

KT-400 . . . . .	KT-400 PCB, accessory kit and metal cabinet with lock and keys
KT-400-PCB . . . . .	KT-400 PCB and accessory kit

## Expansion Modules

KT-MOD-INP16 . . . . .	16-zone input module with 41 cm (16 in) SPI cable
KT-MOD-REL8 . . . . .	8-relay outputs module with 41 cm (16 in) SPI cable
KT-MOD-OUT16 . . . . .	16-zone output module with 41 cm (16 in) SPI cable

## Integration Modules

KT-IT100 . . . . .	DSC PowerSeries Integration Kit: IT-100 integration module and CBLK-IT100 cable kit
KT-4401VK . . . . .	DSC MAXSYS Integration Kit: integration module and 1.8 m (6 ft) RS-232 connector cable set
CBLK-IT100 . . . . .	DSC PowerSeries Cable Kit: 3 m (10 ft) RS-232 connector cable set
CBLK-4401VK . . . . .	DSC MAXSYS Cable Kit: 1.8 m (6 ft) RS-232 connector cable set and EPROM set

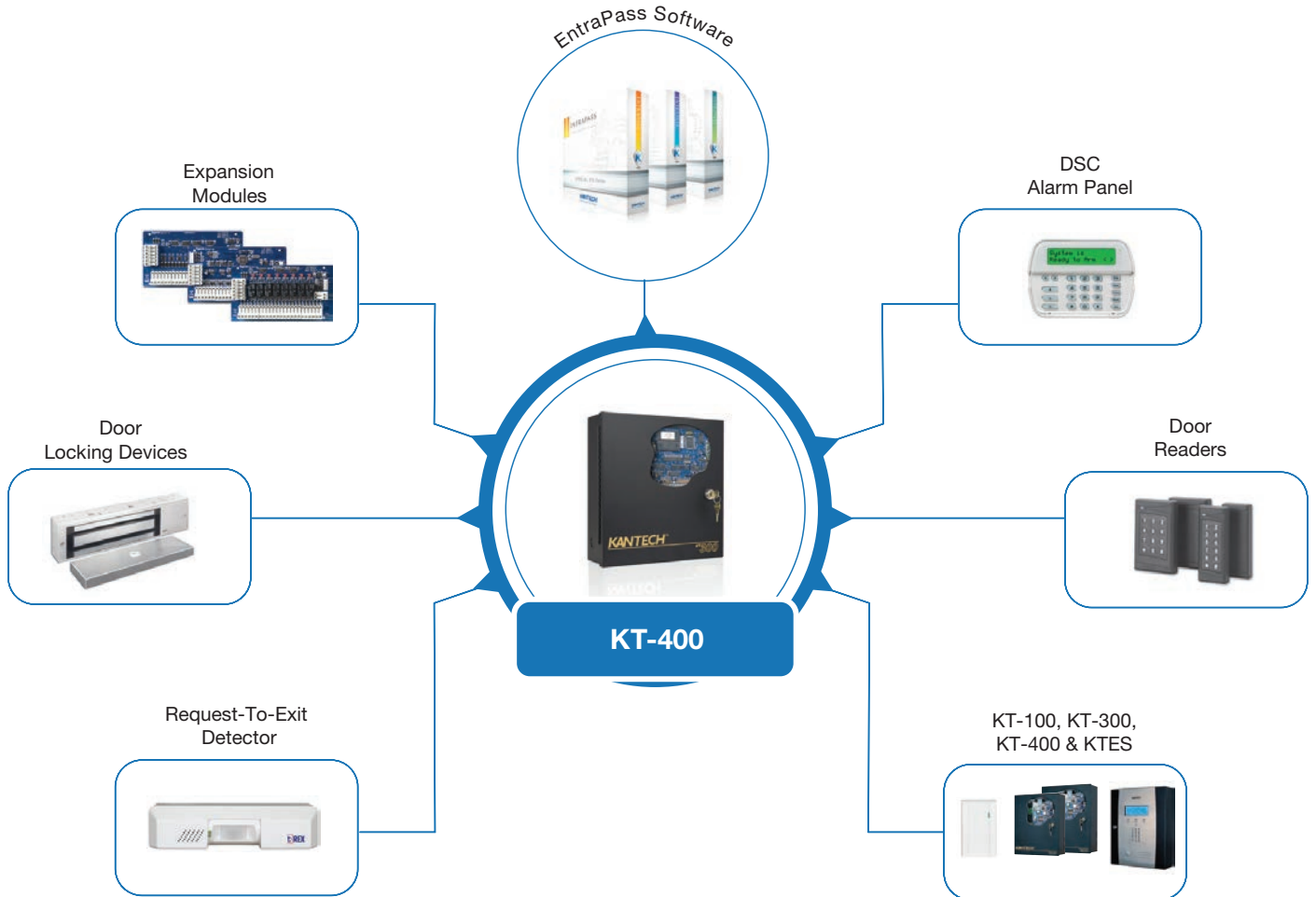
## Accessories

KT-MOD-SPI-16 . . . . .	SPI cable 41 cm (16 in)
KT-MOD-SPI-36 . . . . .	SPI cable 92 cm (36 in)
KT-400-ACC . . . . .	Accessory Kit: resistors (4x 1K $\Omega$ , 32x 5.6K $\Omega$ ), ground wire, battery connector and screwdriver
KT-400-CAB . . . . .	Black metal cabinet with lock and keys
KT-MOD-CAB . . . . .	Cabinet for up to 6 expansion modules, including lock, keys and 92 cm (36 in) SPI cable
KT-TAMPER . . . . .	Tamper switch
KT-LOCK . . . . .	Cabinet lock and 2 keys
KT-400-CON . . . . .	Removable terminal block
KT-3LED-PLATE . . . . .	Alarm (3 LED) indicator

## Power Supplies

TR1675 . . . . .	Wire-in transformer, 110 VAC/ 16.5 VAC (75 VA), UL approved
KT-BATT-12 . . . . .	Gel cell battery, 12 V, 7 Ah
KT-BATT-1212 . . . . .	Gel cell battery, 12 V, 12 Ah

## Basic System Diagram



## Related Products



EntrancePass Security Management Software



Intevo Integrated Security Platform



T.Rex Request-To-Exit Detector



DSC Alarm Panels

## Approvals



[www.kantech.com](http://www.kantech.com)