KANTECH
From Tyco Security Products

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
- Supports eight Kantech ioProx XSF readers
- Data integration with DSC MAXSYS, Power Series and PowerSeries Neo intrusion alarm panels

Ethernet-Ready Encrypted 4-Door Controller

The KT-400 four-door controller is a secure and easy-to-use networked access control solution with support for eight Kantech ioProx XSF entry/exit readers. 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 MAXSYS, PowerSeries and PowerSeries Neo intrusion 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
# of Readers Supported	Eight (Kantech ioProx XSF readers only)
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
CBLK-ITV2	Cable kit, Kantech/DSC PowerSeries Neo, RS-232 to 422 converter, connector and cable 1.8 m (6 ft). Requires a Communication Module TL280 Firmware version 4.10.4.29 or higher

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 Ω, 32x 5.6K Ω), 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

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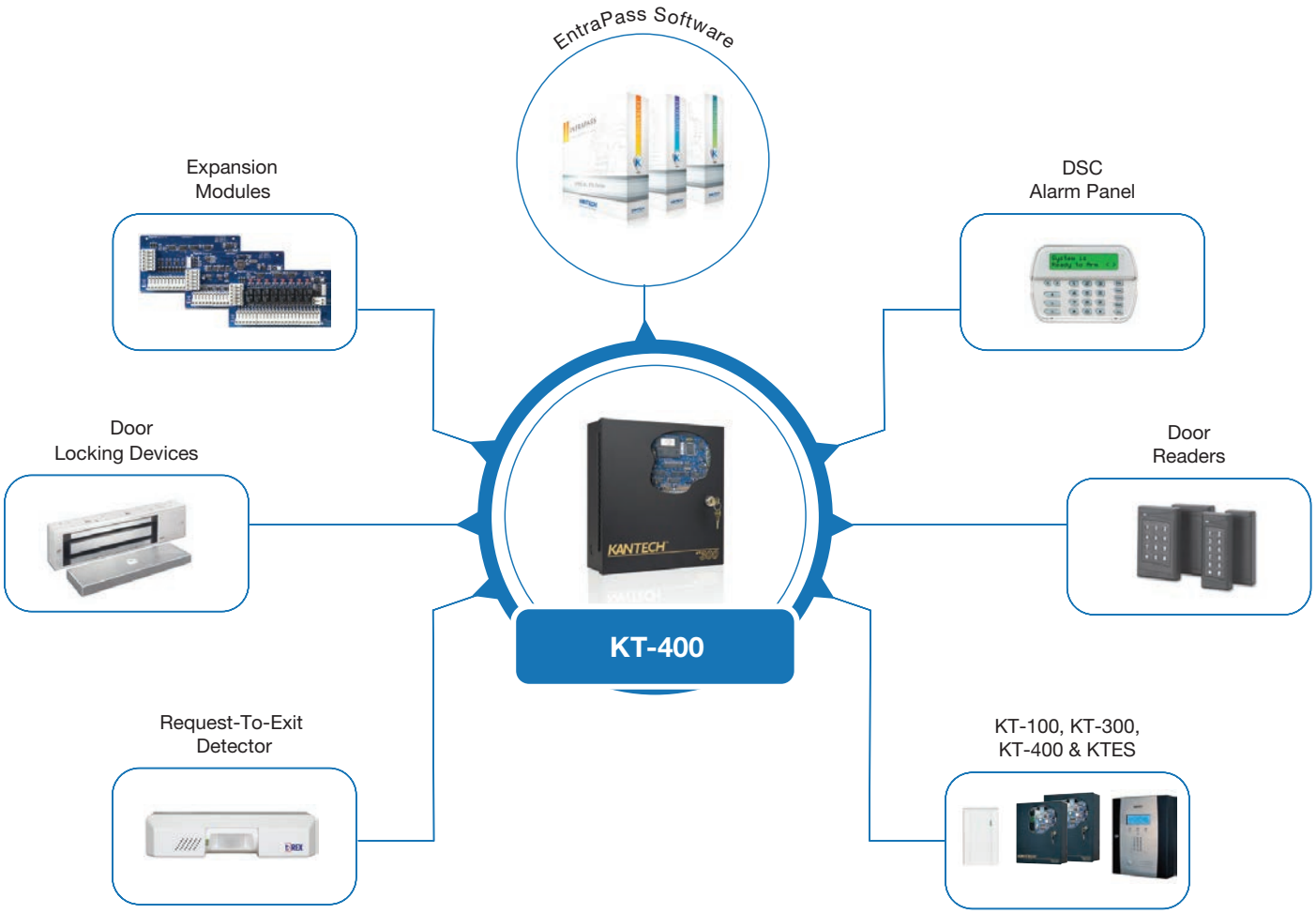
Basic System Diagram



Related Products

EntraPass Security Management Software

Intevo Integrated Security Platform

T.Rex Request-To-Exit Detector

DSC Alarm Panels

Approvals

RoHS 2002/95/EC

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