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Data Sheet

Kantech KT-400
Powerful, Ethernet-Ready Four-Door Controller

Features That Make a Difference

- End-to-end encryption using Kantech's ioSmart reader and smart card

- Configurable in two different modes: Provides advanced access control features when used with EntraPass Security Management Software or basic door security in Standalone Mode

- 100,000 cards and 60,000 stored events in Offline Mode

- Ethernet port for easy connectivity

- Double and triple swipe card at reader to activate relay, arm alarm system, lock/ unlock doors and more

- Supports 8 readers/4 doors (EntraPass Security Management Software). 4 doors/4 readers (Standalone Mode); Kantech ioProx XSF and ioSmart readers

- Data integration with DSC MAXSYS, PowerSeries, PowerSeries Neo and PowerSeries Pro intrusion alarm panels (EntraPass Security Management Software)

KT-400 Ethernet-ready four-door controller supports eight readers (EntraPass Security Management Software) and can be configured in two user friendly operational modes. KT-400's Standalone Mode offers basic door security using a simple web browser without the need to connect to a host system. Alternatively, KT-400 can be used with the powerful EntraPass Security Management Software to provide more advanced and fully integrated access control features.

KT-400 Standalone Mode*

Ideal for sites that only need basic door security, the KT-400 four door controller features an embedded web server which enables it to operate in a Standalone Mode – meaning no EntraPass software is required.

*Compatible hardware: KT-400rev01 without heat sinks

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One Combined Hardware and Web-based Software Solution

With no extra security software to purchase and install, and using an intuitive web browser for quick set up, KT-400 Standalone provides a cost-effective, yet feature rich alternative for four-door security.

Responsive Web-based Software

Intuitive and responsive web-based software enables you to simply manage and configure your four-door security from anywhere, using a desktop or mobile device.

Standalone Set-Up Wizard

KT-400 Standalone offers the ultimate simplicity in access control installation. Simply power up KT-400, connect to a web browser, follow the quick set-up configuration wizard and your four-door security is up and running in minutes.

Standalone Mode Parameters

Function	Limit
Cardholders	2,000 (1,000 with image/ 1,000 without image)
Door Access	Per door, per user
Card Families or Site Codes	Unlimited
Events	60,000 (Offline Mode)
Operators	2 (Installer, Operator)
Schedules	20 (5 intervals)
Holidays	25
Action Scheduler	100
Monitored Points (Inputs)	16
Auxiliary Outputs	12
Browsers	Safari, Google Chrome, Mozilla Firefox, Internet Explorer, Microsoft Edge
Mobile Operating Software	iOS, Android (No native app)
Integrations	Basic intrusion via relays
Upgrade Path	EntraPass/ hattrix
Languages	English, French, Spanish, Italian
Firmware version	KT-400 Standalone version 2.03 and higher on KT-400rev1 (Subject to firmware upgrade fees)

KT-400 using EntraPass

Ethernet-Ready Encrypted 4-Door Controller

The KT-400 four-door controller is a cyber-resilient and easy-to-use networked access control solution with support for up to eight (EntraPass Security Management Software) ioProx XSF and ioSmart readers (4 doors IN/OUT control). 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.

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 128-bit AES encryption to communicate with the Gateway.

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-pass back 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 four 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

Configurable Reader Outputs

There are four different possible outputs for each of the four 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.

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, KT-MOD-OUT16 and KT-MOD-IO16.
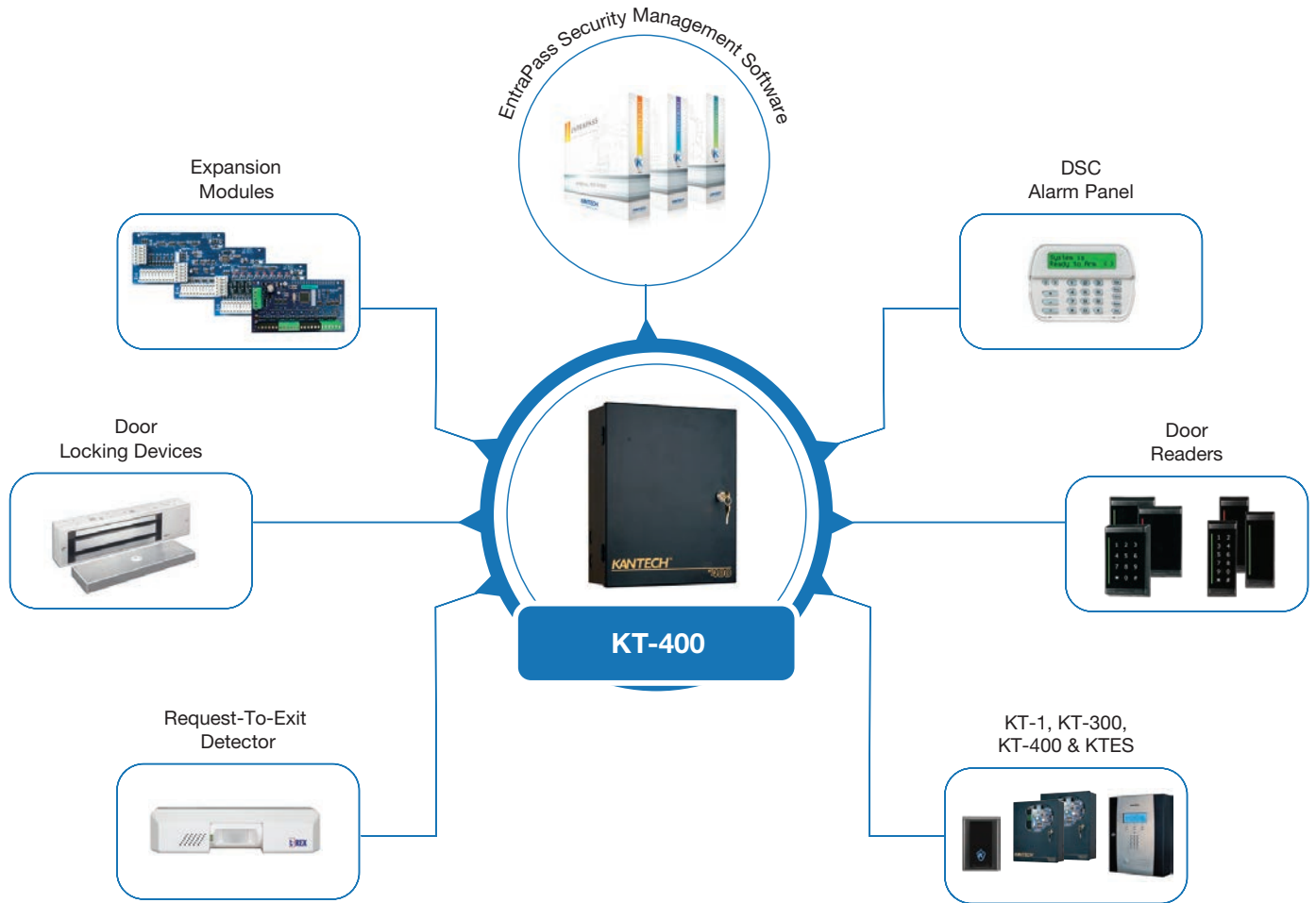
Alarm Panel Integration

DSC MAXSYS, PowerSeries, PowerSeries Neo and PowerSeries Pro 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.

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.

Basic System Diagram

EntraPass Security Management Software

Expansion
Modules

DSC
Alarm Panel

Door
Locking Devices

Door
Readers

KT-400

Request-To-Exit
Detector

KT-1, KT-300,
KT-400 & KTES

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Specifications

Physical	
Cabinet Dimensions (HxWxD)	37.6 x 30.5 x 12.6 cm (14.8 x 12.0 x 4.95 in)
PCB Dimensions (HxWxD)	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	8 (EntraPass Security Management Software), 4 (Standalone Mode); Kantech ioProx XSF and ioSmart readers only
# of Cards when disconnected from EntraPass (Offline Mode)	100,000 (KT-400 and KT-400-PCB)
Monitored Points (Inputs)	16 monitored points, single EOL, double EOL
Points Maximum Wiring	AWG #22 – 600 m (2,000 ft)
Door Strike Power	12 VDC, 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, EN55032, EN60950-1, EN50130-4, FCC Class B, UL-294, UL-1076, CE, RoHS, WEEE	
Warranty	
KT-400 hardware	5 years

Ordering Information

KT-400 Order Information

Model Number	Description
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
KT-MOD-IO16	RS-485 Input/Output Module; compatible with KT-400 and KT-1 controllers
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 (7 VA), UL approved
KT-BATT-12	Gel cell battery, 12 V, 7 Ah
KT-BATT-1212	Gel cell battery, 12 V, 12 Ah

KT-400 Starter Kits

Model Number	Security Software	Controller(s)	Reader(s)	Other Items
SK-CE-400-SCM	EntraPass Corporate Edition	KT-400	KT-MUL-SC (3), KT-MUL-MT-KP (1)	USB-485 converter (1), TR1675 transformer (1), KT-BATT-12 battery (1), MFP-2KSHL smart cards (5) (US and Canada)
SK-CE-400-SCSG	EntraPass Corporate Edition	KT-400	KT-SG-SC (3), KT-SG-MT-KP (1)	USB-485 converter (1), TR1675 transformer (1), KT-BATT-12 battery (1), MFP-2KSHL smart cards (5) (US and Canada)
SK-SE-400-SCM	EntraPass Special Edition	KT-400	KT-MUL-SC (3), KT-MUL-MT-KP (1)	USB-485 converter (1), TR1675 transformer (1), KT-BATT-12 battery (1), MFP-2KSHL smart cards (5) (US and Canada)
SK-SE-400-SCSG	EntraPass Special Edition	KT-400	KT-SG-SC (3), KT-SG-MT-KP (1)	USB-485 converter (1), TR1675 transformer (1), KT-BATT-12 battery (1), MFP-2KSHL smart cards (5) (US and Canada)

KT-400 Expansion Kits

Model Number	Controller	Reader	Other Items
EK-400-MTM	KT-400	KT-MUL-MT (4)	TR1675 transformer (1), KT-BATT-12 battery (1) (US and Canada)
EK-400-MTSG	KT-400	KT-SG-MT (4)	TR1675 transformer (1), KT-BATT-12 battery (1) (US and Canada)
EK-400-SCM	KT-400	KT-MUL-SC (4)	TR1675 transformer (1), KT-BATT-12 battery (1) (US and Canada)
EK-400-SCSG	KT-400	KT-SG-SC (4)	TR1675 transformer (1), KT-BATT-12 battery (1) (US and Canada)

About Johnson Controls

Johnson Controls is a global diversified technology and multi-industrial leader serving a wide range of customers in more than 150 countries. Our 120,000 employees create intelligent buildings, efficient energy solutions, integrated infrastructure and next generation transportation systems that work seamlessly together to deliver on the promise of smart cities and communities. Our commitment to sustainability dates back to our roots in 1885, with the invention of the first electric room thermostat.

For additional information, please visit www.kantech.com or follow us on Twitter, Facebook and LinkedIn.

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