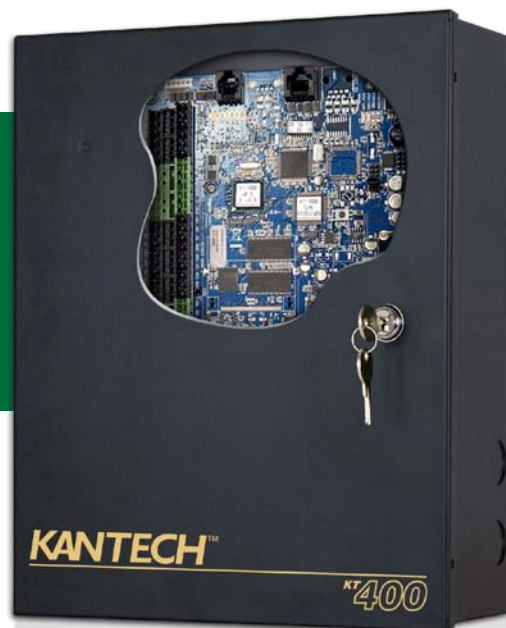# KANTECH
A Tyco International Company

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

Features That Make a Difference[1]:

- Supports four readers

- Secure 128-bit AES encryption solution

- 100,000 cards per controller and 20,000 stored events in stand-alone mode

- Expansion flexibility - connect up to 256 inputs and 256 outputs

- Full integration with DSC PowerSeries and MAXSYS alarm panels

- LEDs provide important controller status and diagnostic information

Ethernet-Ready Encrypted 4-Door Controller
The KT-400 is a 4-door Ethernet-ready controller providing a secure (128-bit AES encryption) solution for any enterprise looking for the highest available security. It easily integrates into existing EntraPass systems and with other Kantech controllers (KT-100, KT-200 and KT-300). The KT-400 can also provide the foundation - with the EntraPass system - for a brand new highly scalable security installation. An onboard Ethernet port ensures quick network connectivity and eliminates the need for an external Ethernet device.

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.

(1) KT-400 is compatible with EntraPass v4.01 and higher

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 internal (12 VDC) or external (12 VDC- 24 VDC) power supply.

Multiple Communication Ports

KT-400 provides multiple controller configurations to suit your specific access control needs. These configurations provide communication with any device on the network for more connection options. You can choose any of the following options:

- IP (Ethernet)

- RS-485 (COM1) for communication between the EntraPass Gateway and KT-100, KT-200 (on a separate loop), KT-300, and KT-400

- RS-232 (COM3) for direct connection to the EntraPass Gateway

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

Alarm panel integration can be accomplished by connecting the KT-400 controller to EntraPass Special, Corporate or Global Editions with Multi-Site Gateway. This in turn is connected to the DSC PowerSeries or MAXSYS alarm panels. The alarm panels are able to receive intrusion events, view the status of zones, and manage partitions and user codes. In addition the system can be armed/disarmed (single or multiple partitions) via reader or manual operation.

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
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,door1, 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
External Lock Power	12 or 24 VDC (up to 28 VDC) supply up to 750 mA per lock for a total of 3 amp

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 four-door controller, IP-ready, accessory kit (KT-400-ACC), metal cabinet (KT-400-CAB) with lock (KT-LOCK)
KT-400-PCB	KT-400 four-door controller (PCB only), and IP-ready accessory kit (KT-400-ACC)

Expansion Modules

KT-MOD-INP16	16-zone input expansion module with SPI cable (KT-MOD-SPI-16)
KT-MOD-REL8	Eight-relay expansion module with SPI cable (KT-MOD-SPI-16)
KT-MOD-OUT16	16-zone output expansion module with SPI cable (KT-MOD-SPI-16)
KT-MOD-CAB	Expansion Module cabinet, black, with 92 cm (36 in) SPI cable (KT-MOD-SPI-36) and lock (KT-LOCK)
KT-MOD-SPI-16	SPI cable 41 cm (16 in)
KT-MOD-SPI-36	SPI cable 92 cm (36 in)

Integration Modules

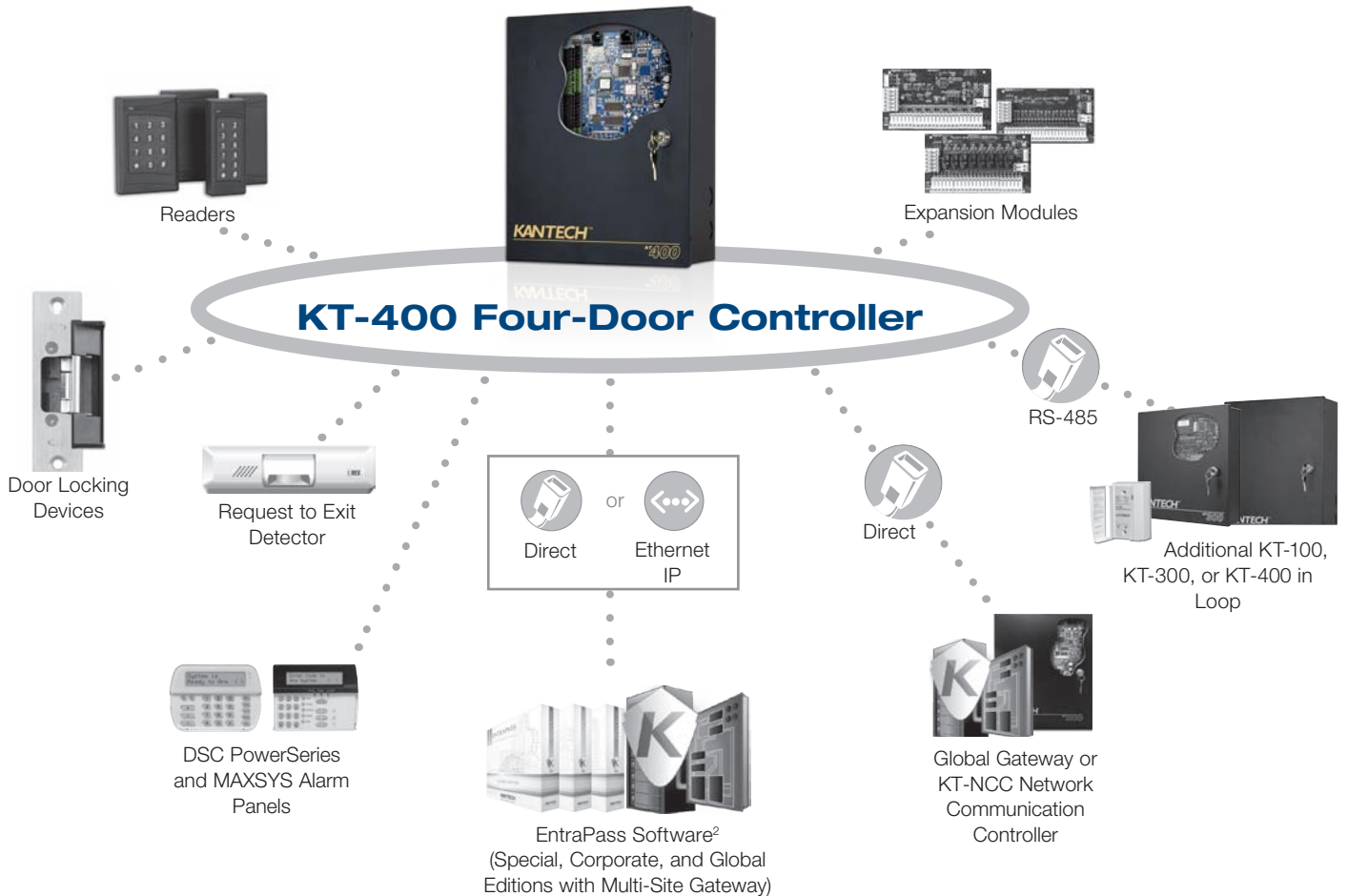|	
KT-IT100	Kantech/DSC PowerSeries integration module. Includes: DSC-IT100 integration module and CBLK-IT100 cable kit
KT-4401VK	Kantech/DSC MAXSYS integration module, RS232 cable/connector, 1.8 m (6 ft)
CBLK-IT100	Cable kit, RS-232 cable/connector set, 3m (10 ft) and compatible with IT-100 DSC PowerSeries Integration Module
CBLK-4401VK.	Cable kit, RS-232 cable/connector, 1.8 m (6 ft), and EPROM set. Compatible with PC-4401 DSC MAXSYS integration module

Accessories

KT-400-ACC	Accessory Kit includes: Four 1.0 K ohm, 32/5.6 K ohm resistors, ground wire, and screwdriver
KT-400-CAB	Black metal cabinet with lock (KT-LOCK)
KT-400-CON	Removable terminal block spare kit
KT-ACPW-LED	UL AC power LED indicator
KT-3LED-PLATE	UL-listed alarm, three-color LED indicator mounted on single gang plate
KT-TAMPER.	Tamper switch for KT-NCC-CAB, KT-300CAB, KT-400-CAB and KT-4051CAB metal cabinets
KT-LOCK.	Lock (and two keys) for KT-NCC-CAB, KT-300CAB, KT-400-CAB and KT-4051CAB metal cabinets

Power Supplies

TR2475	Wire-In transformer, 110VAC/24VAC (75VA), UL approved
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

Readers

Expansion Modules

KT-400 Four-Door Controller

RS-485

Door Locking Devices

Request to Exit Detector

Direct   or   Ethernet IP

Direct

Additional KT-100, KT-300, or KT-400 in Loop

DSC PowerSeries and MAXSYS Alarm Panels

EntraPass Software[2] (Special, Corporate, and Global Editions with Multi-Site Gateway)

Global Gateway or KT-NCC Network Communication Controller

(2) KT-400 is compatible with EntraPass v4.01 and higher

Related Products

EntraPass Security Software

DSC PowerSeries and MAXSYS Alarm Panels

Expansion Modules

Approvals

RoHS 2002/95/EC

CE

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