KT-300 Two-Reader Controller

Data Sheet

Features That Make a Difference

- Controls two readers and easily links to a network
- Update firmware directly from system workstation
- Fast operation, up to 115,200 baud
- Ready to go, no DIP switches or jumpers to set
- Interfaces with an external alarm system
- Choice of 128K or 512K memory capacities
- LEDs provide important controller status and diagnostic information

Scalable Two-Reader Door Controller

The KT-300 is a two-reader networkable door controller. One controller supports up to two readers, installed on two separate doors or on a single door controlling both entry and exit. Each controller is linked to the others in the system using an RS-485 communication bus providing control for up to a million doors depending on the EntraPass Edition.

Easy Firmware Updates

The KT-300 features flash memory for easy firmware updates. The controller's firmware can be updated from any EntraPass workstation in just a few minutes. Flash memory saves time by allowing system updates from a PC without having to update each controller individually.

Speed Selection and Trouble/Reporting

KT-300 detects the system's communication speed (set by EntraPass) and assigns the controller's address, eliminating the need to set up DIP switches or jumpers. KT-300 also provides trouble reporting, constantly supervising locking devices for short and open circuits to detect lock failures. It also monitors battery condition to alert the system of low battery/ no battery status. All power outputs are individually protected against short circuits and surges by a self-resetting PTC.

Expandable

The KT-300 can be expanded via Combus expansion modules allowing for relay, input and output modules, and an LCD time and date display.

Status Indicators

LEDs provide important controller status and diagnostic information. The KT-300 has multiple LED indicators for: communication status, troubleshooting, network activity, power status and outputs activity.
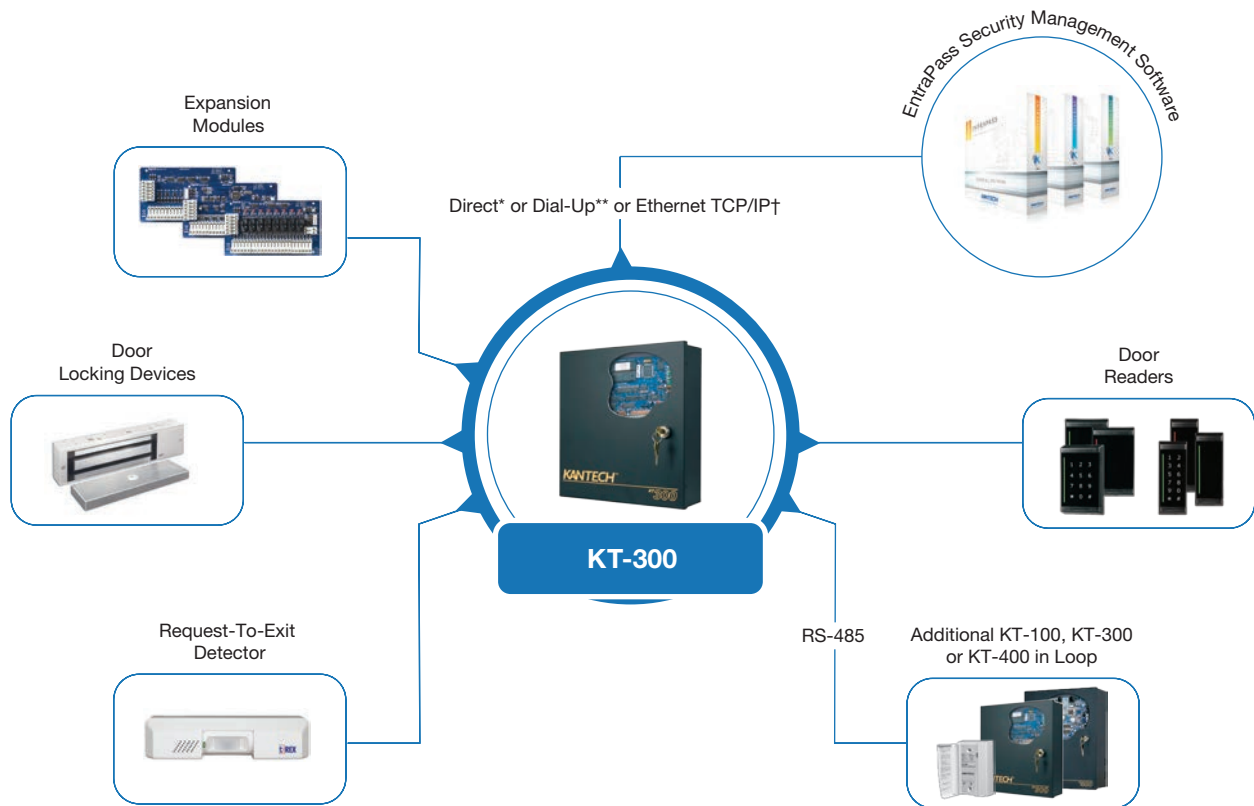
External Alarm Interface

The KT-300 can interface with an external intrusion alarm system. An authorized individual can arm or disarm the alarm system simply by presenting their card to a reader.

Network Connectivity

The KT-IP (IP controller module) provides affordable and secure LAN/WAN network connectivity for the KT-300 door controller. In this setup, the KT-300 is first connected to a VC-485 (RS-232/ RS-485 interface). Then the VC-485 is connected to the KT-IP (and both devices are powered by the KT-300). The KT-IP relays information between the KT-300 and the EntraPASS Multi-Site Gateway.

Basic Wiring Diagram

Expansion Modules

EntraPass Security Management Software

Direct* or Dial-Up** or Ethernet TCP/IP†

Door Locking Devices

Door Readers

KT-300

Request-To-Exit Detector

RS-485   Additional KT-100, KT-300 or KT-400 in Loop

* Direct via RS-232 or RS-485 with USB-485 or VC-485 converters.
** Dial-up: Using RS-232 serial modem at remote site.
† Ethernet TCP/IP: Using Lantronix Universal Device Server, or using Kantech IP Link with EntraPass Special Edition/Corporate Edition/ Global Edition. A Multi-Site Gateway is required with EntraPass Global Edition.

Specifications

Physical	
Dimensions	29.9 x 28.8 x 7.7 cm (11.75 x 11.38 x 3.0 in)
Knock Out Dimensions	1.9 cm (0.8 in)
Weight (with metal cabinet)	2.4 kg (5.4 lbs)
Environmental	
Operating Temperatures	2° to 40°C (35° to 104°F)
Electrical	
Input Power	16 VAC, 40 VA, Class 2 transformer
Battery Backup	One battery 12V/7Ah, supervised, provides operation for up to 12 hours
Auxiliary Outputs (LED, BUZ)	Four outputs, 25 mA max. each, open collector
Control Relay Outputs (R1, R2)	Two control relay outputs, 12 VDC, 25 mA totals each, open collector (optional relay KT-RM1 available)
Auxiliary Power Output	11.1 VDC to 13.8 VDC @175 mA maximum, protected and supervised
Reader Power Outputs	12 VDC and 5 VDC @125 mA total, protected and supervised
Door Strike Power	12 VDC, 250 mA each, supervised
Operational	
Compatible Reader Types	Wiegand, proximity, bar code, magnetic, integrated keypad, and others
Monitored Points (Inputs)	Eight monitored points, NO/NC, with or without end-of-line resistors (expandable to 16)
Max. Wiring Distance	600 m (2,000 ft) – (AWG #22)
Communication Ports	RS-232, RS-485, and Combus
Communication Speed	Up to 115,200 baud (automatic detection)
Firmware Flash Memory	128K
RAM	128K or available 512K, protected by a lithium battery
Network Autonomy	Distributed data and processing
Regulatory	
Certifications	UL 294, CE, FCC

Ordering Information

Model Number	Description
Door Controllers	
KT-300/128K	KT-300 two-door controller, 128KB memory, accessory kit (KT-300-ACC), metal cabinet (KT-300CAB) with lock (KT-LOCK)
KT-300/512K	KT-300 two-door controller, 512KB memory, accessory kit (KT-300-ACC), metal cabinet (KT-300CAB) with lock (KT-LOCK)
KT-300PCB128	KT-300 two-door controller PCB only, 128KB memory, accessory kit (KT-300-ACC)
KT-300PCB512	KT-300 two-door controller PCB only, 512KB memory, accessory kit (KT-300-ACC)

Expansion Modules	
KT-PC4108	8-zone programmable input expansion module
KT-PC4204	4-relay output and Combus power supply module
KT-PC4216	16-zone programmable output expansion module
Accessories	
KT-300-ACC	KT-300 accessory kit, includes: two 1.0K ohm, ten 5.6K ohms, two 120 ohms end-of-line resistors, PCB standoff, lock hole cover, ground wire and screwdriver
KT-RM1	External isolation relay, single pole, double through (SPDT) for output RL1/RL2
KT3-LCD	LCD time and date display
KT-300CAB	Black metal cabinet with lock (KT-LOCK)
KT-4051CAB	Black metal cabinet for KT-300 expansion modules. Order KT-LOCK separately.
KT-LOCK	Lock for KT-300-CAB & KT-4051-CAB, metal cabinets, 2 keys
KT-300FLASH	Replacement firmware
KT-TAMPER	Tamper switch for KT-300-CAB & KT-4051CAB metal cabinets
Power Supplies	
TR1637W/CSA	AC transformer, wire-in, 110V/16V (37 VA) CSA
TR1640P/CSA	AC transformer, plug-in, 110V/16V (40 VA) CSA
TR1640P/UL	AC transformer, plug-in, 110V/16V (40 VA) UL
TR1640W-220	AC transformer, wire-in, 220V/16V (40 VA) CE