

## KT-300 Two-Reader Controller

### 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.

### 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

### Model Numbers

#### 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

### Basic System Diagram

