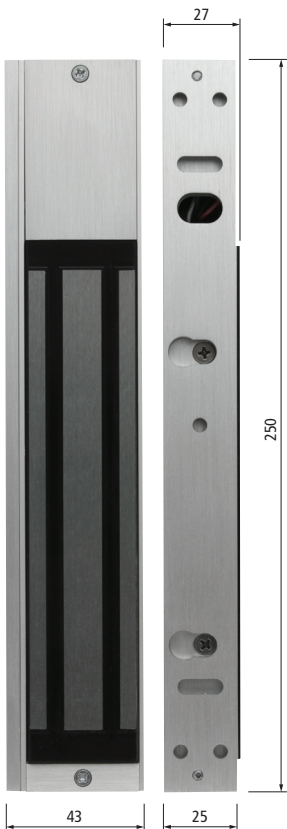


ML 600



All dimensions in mm

- Supplied complete with armature and fixing hardware
- Dual Voltage
500mA / 12VDC
250mA / 24VDC
- Integral voltage spike suppressor
- 2 Year limited warranty
- Designed to meet UL/cUL/CE/FCC requirements

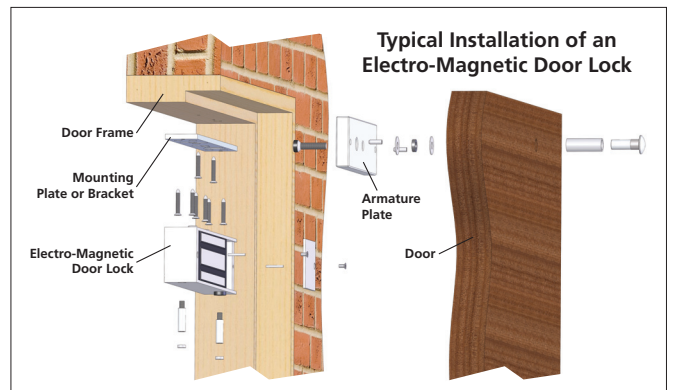
Description	12V/24V DC Electro-Magnetic Door Lock
Model	DEL600
Holding Force	600 Pounds
Installation Environment	Non-perimeter Medium security Internal locations

12V/24V Electro-Magnetic Internal Door Lock

Powerful electro-magnetic door locks are the most convenient and effective way to achieve secure access control.

Unlike conventional locks ML600 surface mounted mag-locks require minimal modification of doors or frames and are ideal for all types of doors, including iron doors and gates, glass doors or doors surrounded by glass panels. Installation is quick and easy using basic tools (no carpentry skills required). Doors and frames are not weakened or compromised during installation. The installed lock is discreet but very secure, with up to 600 pounds holding force. Most door frames will break before the lock lets go. The lock is supplied complete with fixing brackets, armature plates and comprehensive installation instructions for both inward and outward opening doors.

There are ML600 Mag-locks available for both external and internal doors.



KT-1

Ethernet-Ready, One Door Controller

Features That Make a Difference:

- Supports 2 readers (entry and exit)
- Single touch-sensitive button for fast controller enrollment
- Plug & play installation
- Interchangeable connections for easy install or replacement
- Flexible power input – Power over Ethernet (PoE), PoE+ or 12 VDC
- Compact and attractive design – install it anywhere
- Built-in electronic tamper
- Choose from single gang mount (model KT-1) or cabinet mount (KT-1-PCB) installation options
- Compatible with existing Kantech controllers including KT-300 and KT-400
- Compatible with Entrapass Security Management Software v6.02 or higher



KT-1



KT-1-PCB

One Touch

The KT-1 controller features a touch-sensitive button for plug and play installation. Simply provide an IP connection, push a single button and you're done. There is no need to manually enter MAC/Serial numbers. With its innovative single button programming, the KT-1 is automatically detected and enrolled onto the Entrapass security management software (v6.02 and higher).

With its Ethernet port for direct network connection, its Power over Ethernet capabilities and its unique single button programming, the KT-1 controller is up and running in just a few simple steps.

Head IP Controller Function

A single KT-1 can act as a 'head IP controller', linking together 31 additional controllers under one IP connection in Entrapass. This significantly reduces the amount of IP connections required to Entrapass and reduces programming time on the software. Thus creating installation cost benefits and a highly scalable solution.

Alarm Panel Integration

DSC PowerSeries (including NEO) or MAXSYS alarm panel data integration can be accomplished by connecting it to the KT-1 controller (KT-1-PCB model only). Using this controller; 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.

Secure and Efficient Network Communication

The KT-1 is compatible with Entrapass software and uses 128-bit AES encryption to ensure secure communication. It also acts as a polling device to ensure the controllers communicate with Entrapass only as required, reducing network traffic. Flexible options allow KT-1 to connect to Entrapass via:

- On-board IP (Ethernet) port
- RS-485 (COM1) port for communication between the Entrapass Gateway/Kantech Network Communication Controller (KT-NCC) and KT-300/KT-400 door controllers



Combine the new KT-1 controller with Entrapass security management software and the Entrapass Web and Go mobile applications to create an innovative solution that installs quickly, can be managed remotely and provides a superior user experience.

Physical

KT-1	
Plastic Housing Dimensions (H x W x D)	12.9 x 8.6 x 4.6 cm (5.1 x 3.4 x 1.8 in)
Weight	305 g (10.8 oz)
KT-1-PCB	
Dimensions (H x W x D)	13.8 x 12.1 x 4.8 cm (5.4 x 4.8 x 1.9 in)
Weight	395 g (13.9 oz)
Environmental	
Operating Temperature	2° to 40°C (35° to 104°F)
Operating Humidity	0% to 95% non-condensing
Electrical	
KT-1/KT-1-PCB Power Input	12 VDC / PoE / PoE+, 2.2 A
Reader Power Output	Maximum 0.5 A @ 12 VDC, typical 250mA per reader, protected and supervised
Lock Device Power	12VDC, typical 750mA supervised (PoE+ & 12vdc power input) & 12VDC, typical 250mA supervised (PoE)
KT-1-PCB Controlled Output Relay (R1, R2)	2 onboard form C controlled outputs relays, 30 VDC, 3 A max each
Communication Ports	RS-485, Ethernet 10/100Base-T with RJ-45
Expansion Port	RS-485
Auxiliary Port	Auxiliary 12 VDC, 500 mA maximum
Communication Speed	Up to 115,200 baud (automatic detection over 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

Environmental

Operating Temperature 2° to 40°C (35° to 104°F)
 Operating Humidity 0% to 95% non-condensing

Electrical

KT-1/KT-1-PCB Power Input 12 VDC / PoE / PoE+, 2.2 A
 Reader Power Output Maximum 0.5 A @ 12 VDC, typical 250mA per reader, protected and supervised
 Lock Device Power 12VDC, typical 750mA supervised (PoE+ & 12vdc power input) & 12VDC, typical 250mA supervised (PoE)

Operational

One Button Enrollment Capacitive touch-sensitive button
 Reader Types Wiegand, proximity, ABA clock and data, bar code, magnetic, integrated keypad, smart card, RS-485 (Kantech Protocol)

Number of Cards in Stand-Alone Mode 100,000 (KT-1 and KT-1-PCB)
 Monitored Points (Inputs) 4 monitored points, single EOL, double EOL (Independently programmable)
 Reader Outputs LED and buzzer (25 mA maximum each, open collector outputs)
 Auxiliary Outputs OUT3 and OUT4 (25 mA each, open collector outputs)
 KT-1 Controlled Output Relay 2 controlled output relays, 12 VDC, 25 mA each, open collector (optional relay KT-RM1 also available)

Model Numbers

KT-1 Ethernet-ready, one door controller, single gang mount
 KT-1-M Ethernet-ready one door controller (KT-1-PCB) and metal cabinet (KT-1-CAB-M)
 KT-1-PCB Ethernet-ready, one door controller, cabinet mount

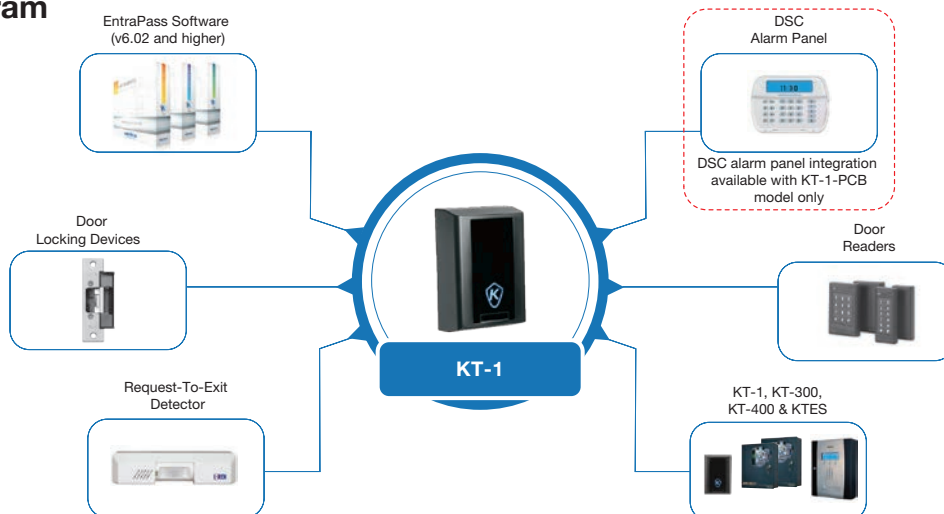
Accessories

KT-1-CVR Black plastic replacement cover, fits KT-1 and KT-1-PCB
 KT-1-CAB-M Black metal cabinet, fits KT-1-PCB (H x W x D) 29.9 x 28.8 x 7.7 cm (11 3/4 x 11 3/8 x 3 in)

Regulatory

EN60839-11-1 Grade 1, EN50130-4:2011, EN55022, EN60950, FCC
 UL, UL-294, UL-1076
 IC, NMB-003, C-Tick
 CE

System Diagram



Related Products



Approvals



PHYSICAL ACCESS SOLUTIONS



multiCLASS SE® Readers

HIGHLY ADAPTABLE AND SECURE HIGH FREQUENCY ACCESS CONTROL SOLUTION

- **Powerfully Secure** – Provides layered security beyond the card media for added protection to identity data using SIOs.
- **Adaptable** – Interoperable with a growing range of technologies (iCLASS® Seos™ and iCLASS SE® credential platforms, standard iCLASS®, MIFARE®, and MIFARE® DESFire® EV1 with custom data models) and form factors including mobile devices utilizing Seos™.
- **Interoperable** – Open Supervised Device Protocol (OSDP) for secure, bidirectional communication.
- **Streamlined Migration** – Support for 125 kHz HID Prox®, Indala®, AWID and EM4102 for seamless migration; field programmable for secure upgrades and extended lifecycle.



HID Global's iCLASS SE® platform goes beyond the traditional smart card model to offer a secure, standards-based and flexible platform that has become the new benchmark for highly adaptable, interoperable and secure access control solutions.

MIFARE DESFire EV1 with custom data models and other leading technologies.

Additionally, multiCLASS SE readers support mobile devices utilizing Seos, enabling a new class of portable identity credentials that can be securely provisioned and safely embedded into both fixed and mobile devices.

multiCLASS SE readers include Open Supervised Device Protocol (OSDP), a new Security Industry Association (SIA) standard that together with Secure Channel Protocol (SCP) provides secure communications and central management.

multiCLASS SE® readers simplify migration from legacy technologies with support 125 kHz for HID Prox, Indala, AWID and EM4102, and provide customers the assurance that their existing investments can be leveraged to enhance their system as business requirements change. The technology-independent readers also support iCLASS® Seos™ and iCLASS SE credential platforms, as well as standard iCLASS, MIFARE and

As part of HID Global's iCLASS SE platform that is based on the Secure Identity Object™ (SIO®) data model and Trusted Identity Platform® (TIP™), the powerfully secure multiCLASS SE readers offer advanced features such as layered security beyond the card media and tamper-proof protection of keys/cryptographic operations using EAL5+ secure element hardware.

POWERFULLY SECURE:

- Multi-Layered Security – Ensures data authenticity and privacy through the multi-layered security of HID's SIO.
- EAL5+ Certified Secure Element Hardware – Provides tamper-proof protection of keys/cryptographic operations.
- SIO Data Binding – Inhibits data cloning by binding an object to a specific credential.
- Secured communications using OSDP with Secure Channel Protocol.

HIGHLY ADAPTABLE:

- Mobile device support using iCLASS Seos - Enables HID access control.
- SIO Portability – Provides technology independence and portability to other smart card technologies.
- Upgradeable Hardware Connection – Allows all Wiegand-based communication readers to expand communication capabilities to OSDP and other bidirectional protocols.
- Field Programmable Readers – Provides secure upgrades for migration and extended lifecycle.

- Customization and management from a central location – Enables organization to make changes and manage all attached OSDP readers over RS485 wiring.
- Support for 125kHz HID Prox, Indala, AWID and EM4102.
- Flexible to support future technologies.

SUSTAINABILITY AND MANAGEMENT:

- Intelligent Power Management (IPM) – Reduces reader power consumption by as much as 75% compared to standard operating mode.
- Recycled Content – Contributes toward building LEED credits.

INTEROPERABLE:

- SIO Media Mapping – Simplifies deployment of third-party objects to multiple types of credentials.
- Industry standard communications using OSDP.
- Custom programming support to read custom data models on MIFARE and MIFARE DESFire EV1 credentials.

SPECIFICATIONS

	RP10	RP15	RP30	RP40	RPK40
Base Part Number	900P 900L	910P 910L	930P 930L	920P 920L	921P 921L
Typical Read Range* (inches)	13.56 MHz Single Technology ID-1 Credentials (Cards) – SIO Model Data				
	iCLASS SE: 2.5" (6.4 cm) SE for DESFire® EV1: 1" (2.5 cm) SE for MIFARE® Classic: 2.3" (5.8 cm)	iCLASS SE: 2.5" (6.4 cm) SE for DESFire® EV1: 1" (2.5 cm) SE for MIFARE Classic: 2.3" (5.8 cm)	iCLASS SE: 3.3" (8.4 cm) SE for DESFire® EV1: 2" (5.1 cm) SE for MIFARE Classic: 2.3" (5.8 cm)	iCLASS SE: 4.5" (11.4 cm) SE for DESFire® EV1: 2" (5.1 cm) SE for MIFARE Classic: 4" (10.1 cm)	iCLASS SE: 4.5" (11.4 cm) SE for DESFire® EV1: 2" (5.1 cm) SE for MIFARE Classic: 4" (10.1 cm)
	13.56 MHz Single Technology Tags/Fobs – SIO Data Model				
	iCLASS SE: 1" (2.5 cm) SE for MIFARE Classic: 0.5" (1.3 cm)	iCLASS SE: 1" (2.5 cm) SE for MIFARE Classic: 0.5" (1.3 cm)	iCLASS SE: 1.5" (3.8 cm) SE for MIFARE Classic: 1" (2.5 cm)	iCLASS SE: 2.3" (5.8 cm) SE for MIFARE Classic: 1.5" (3.8 cm)	iCLASS SE: 2.3" (5.8 cm) SE for MIFARE Classic: 1.5" (3.8 cm)
	125 kHz Single Technology ID-1 Credentials (Cards) – Respective Prox Data Model				
	HID Prox / AWID: 2" (5.1 cm) Indala Prox: 1" (2.5 cm) EM4102: 3.5" (8.9 cm)	HID Prox / AWID: 2" (5.1 cm) Indala Prox: 1" (2.5 cm) EM4102: 3.5" (8.9 cm)	HID Prox / AWID: 2.3" (5.8 cm) Indala Prox: 1" (2.5 cm) EM4102: 2" (5.1 cm)	HID Prox / AWID: 2.5" (6.4 cm) Indala Prox: 1" (2.5 cm) EM4102: 4" (10.2 cm)	HID Prox / AWID: 2.5" (6.4 cm) Indala Prox: 1" (2.5 cm) EM4102: 3" (7.6 cm)
125 KHz Single Technology Tags/Fobs – Respective Prox Data Model †					
HID Prox / AWID: 1" (2.5 cm) Indala Prox: 0.5" (1.3 cm) EM4102: 1.3" (3.3 cm)	HID Prox / AWID: 1" (2.5 cm) Indala Prox: 0.5" (1.3 cm) EM4102: 1.3" (3.3 cm)	HID Prox / AWID: 1.3" (3.3 cm) Indala Prox: 0.5" (1.3 cm) EM4102: 1.3" (3.3 cm)	HID Prox / AWID: 1.5" (3.3 cm) Indala Prox: 0.5" (1.3 cm) EM4102: 2.3" (5.8 cm)	HID Prox / AWID: 1.5" (3.3 cm) Indala Prox: 0.5" (1.3 cm) EM4102: 2.3" (5.8 cm)	
Mounting	Mini-Mullion Size; physically HID's smallest iCLASS readers and are ideally suited for mullion-mounted door installations, U.S. single-gang J-box (with mud ring) or any flat surface	Mullion Size; physically HID's second smallest iCLASS readers and are ideally suited for mullion-mounted door installations, U.S. single-gang J-box (with mud ring) or any flat surface	EU / APAC Square Size; 83.8 mm (3.3") square reader is designed to mount to and cover standard European and Asian back boxes	Wall Switch Size; designed to mount and cover single gang switch boxes primarily used in the Americas and includes a slotted mounting plate for European and Asian back box spacing	
Color	Black or Gray				
Keypad	No				Yes (4x3)
Dimensions	1.9" x 4.1" x 0.9" 4.8 cm x 10.3 cm x 2.3 cm	1.9" x 6.0" x 0.9" 4.8 cm x 15.3 cm x 2.3 cm	3.3" x 3.3" x 0.9" 8.4 cm x 8.4 cm x 2.3 cm	3.3" x 4.8" x 1.0" 8.4 cm x 12.2 cm x 2.4 cm	3.3" x 4.8" x 1.1" 8.5 cm x 12.2 cm x 2.8 cm
Product Weight (Pigtail)	4.0oz (114g)	5.2oz (149g)	5.3oz (151g)	7.8oz (222g)	9.1oz (258g)
Product Weight (Terminal Strip)	3.0oz (85g)	4.3oz (124g)	4.1oz (118g)	7.6oz (216g)	8.0oz (228g)
Operating Voltage Range	5-16 VDC, Linear supply recommended				
Current Draw - Standard Power Mode (mA)*	75	75	85	85	95
Current Draw - Intelligent Power Management (IPM) Mode*** (mA)	40	40	50	50	70
Peak Current Draw - Standard Power or IPM Mode*** (mA)	200	200	200	200	220
NSC** Power Consumption - Standard Power Mode (W @ 16VDC)†	1.2	1.2	1.4	1.4	1.5
NSC** Power Consumption - w/ IPM (W @ 16VDC)	0.6	0.6	0.8	0.8	1.1
Operating Temperature	-31° to 150° F (-35° to 65° C)				
Storage Temperature	-67° to 185° F (-55° to 85° C)				
Operating Humidity	5% to 95% relative humidity non-condensing				
Environmental Rating	Indoor/Outdoor IP55; IP65 if installed with optional gasket (IP65GSKT)				
Transmit Frequency	13.56 MHz & 125 kHz				
13.56 MHz Card Compatibility	Secure Identity Object™ (SIO) on iCLASS Seos, iCLASS SE/SR, MIFARE DESFire EV1 and MIFARE Classic (On by Default) - standard iCLASS Access Control Application (order with Standard interpreter) - ISO14443A (MIFARE) CSN, ISO14443B CSN, ISO15693 CSN - Mifare and Mifare DESFire EV1 custom data models - FIPS-201 Credentials including PIV, PIV-I, CIV, CAC, TWIC, FRAC; Contactless Interface				
125 kHz Card Compatibility	HID Prox, AWID, Indala, EM4102				
Communications	Optional OSDP with SCP over RS485 Wiegand/Clock-and-Data Interface 500ft (150m) (22AWG) - Use Shielded cable for best results				
Panel Connection	Pigtail or Terminal Strip				
Certifications	UL294/cUL (US), FCC Certification (US), IC (Canada), CE (EU), C-tick (Australia, New Zealand), SRRC (China), MIC (Korea)****, NCC (Taiwan)****, iDA (Singapore)****, RoHS, FIPS-201 Transparent FASC-N Reader				
Crypto Processor Hardware Common Criteria Rating	EAL5+				
Patents	US7180403, US7439862, US7124943, US5952935, US6058481, US6337619				
Housing Material	UL94 Polycarbonate				
Manufactured with % of recycled content (Pigtail)	10.5%	11.0%	11.0%	10.5%	10.9%
Manufactured with % of recycled content (Terminal Strip)	10.5%	11.0%	10.0%	11.0%	12.3%
UL Ref Number	RP10E	RP15E	RP30E	RP40E	RPK40E
Warranty	Limited Lifetime				

* Typical read range achieved in air. Different types of metal will cause some degradation (typically up to 20%).

Use spacers to space product off metal and improve read range if required.

** NSC = Normal Standby Current; See Installation Guide for Details.

*** Measured in accordance with UL294 standards; See Installation Guide for Details.

**** Certification for 9xxP part numbers only. Not available on 9xxL part numbers.

† Values shown are for 9xxP base part numbers. See Installation Guide for Current Draw values for 9xxL base part numbers.

RBSN Relay Module

Description

EntraPass RBSN relay is designed for continuous duty.
This rugged and dependable relay will handle any switching application.



Specifications

Input

Voltage 12VDC or 24VDC operation.
Current Draw 15mA.

1A/120VAC or 2A/28VDC DPDT contacts.

Physical and Environmental

Dimensions (L x W x H)
2.75" x 2" x 1" (69.85mm x 50.08mm x 25.4mm).
Product Weight 0.15 lbs. (0.06 kg).
Shipping Weight 0.25 lbs. (0.11 kg).
Temperature

ST1 Snap Track

Overview

Snap track for models: RB5, RB1224, RBSN, RBST and RB30.

Dimensions

(H x W x D approximate)

3.0" x 2.875" x 0.64" (76.2mm) (73.02mm) 16.3mm

Weights (approximate):

Product Weight: 0.1 Lbs (0.045 kg)
Shipping Weight: 0.1 Lbs (0.045 kg)

