TruPortal™ Series

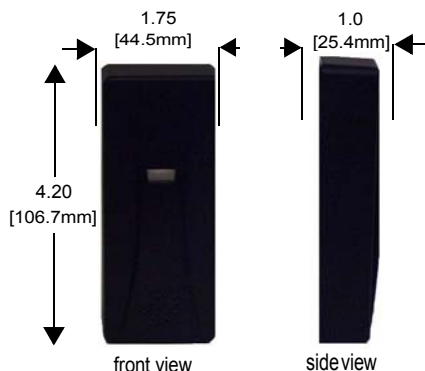T-200 Model Reader (en-US)

Description

The T-200 card reader is a card serial number reader compatible with the following 13.56 mHz technologies:

Vicinity (ISO 15693)	HID iCLASS® Serial Number
	Infineon my-d® Serial Number
	Philips I-Code Serial Number
Proximity (ISO14443)	DESFire® Serial Number
	MIFARE® Serial Number

Mounting the reader

1. Find a suitable mounting position on the door frame or wall.
2. Drill two vertical mounting holes 2.25" (57.2 mm) apart on the mounting surface of the door frame or wall.

Figure 1. Dimensions

1.75 [44.5mm]
1.0 [25.4mm]
4.20 [106.7mm]

front view   side view

3. Drill one 1.00" (25.4 mm) diameter hole in wall for the pigtail wire connection.
4. Follow the Cable Connection Chart to connect the reader to the field panel and external door equipment.
5. Mount the base plate to the wall using the supplied screws.

6. Hook the top of the reader case to the top of the base plate and press into place.

Figure 2. Aligning top cover, reader case, and base plate.

7. Install the supplied screw in the base of the reader.
8. Snap the cover on the top of the case.

Connecting the cable

1. The readers are supplied with an 8-conductor cable pigtail with drain wire. Connect the pigtail to the host panel. Use the Cable Connection Chart (below) to correctly match the color of each wire.

Color	Signal
Black	Ground
Blue	Beeper
Brown	Red LED Control
Green	Data 0
Orange	Green LED Control
Red	5 to 16 VDC
White	Data 1
Drain	Shield Ground

2. Use a DC power source between 5-16 VDC.
3. Connect reader's drain wire to the cable shield. Connect shield wires at the field panel.

Testing the reader

1. Power up the reader. Verify the power-on self test LED/beep sequence:
   - green LED flashes; two short beeps
   - yellow LED flashes; three short beeps
   - red LED flashes
   - yellow LED flashes
2. Verify the yellow LED is on continuously indicating the reader is ready.
3. Present a badge that has been properly enrolled in the system. Verify the green LED lights and a short beep is heard.

Removing the cover

To remove the cover, squeeze the sides of the top cover and pull to release the cover.

Specifications

Colors	Black, Charcoal, Gray	
Power supply	Linear DC recommended	
Power usage	50 mA @ 12 VDC	
Voltage range	5 - 16 VDC	
Temperature range[a]	-31°F to 149°F (-35°C to 65°C)	
Cable distance to panel[b]	Cable Distance Max. @ 12 VDC	AWG
	200 ft. (60.96 m)	22
	300 ft. (91.44 m)	20
	500 ft. (152.4 m)	18
Read Range[c] *(Distances may vary depending on environment.)*	- Mifare: up to 1.0" (2.54 cm) Ultralight cards not supported - Vicinity: up to 3.5" (8.89 cm)	
Wiegand output	- Mifare 4002 (40-bit) - Vicinity 5502 (55-bit)	
Regulatory approvals and standards	UL 294, CE, and FCC (part 15)	
ISO Standards	Mifare ISO 14443A Vicinity ISO 15693	

UL evaluation for UL Listed Installations:

a. -25°F to 125°F (32°C to 52°C)
b. 500 ft. (152.4 m) max. 22 AWG @ 12 VDC
   200 ft. (60.96 m) max. 22 AWG @ 5 VDC
c. Vicinity: up to 3.0" (7.62 cm)

The voltage specification for this reader is 5-16 VDC, although 12 VDC or greater is recommended for better performance and cable run distances.

The recommended cable gauge is 18-gauge to 22-gauge. Check with the cable supplier to determine the best choice for the application and installation distance.

FCC compliance

The FCC requires the following statement: This reader uses radio frequency energy, has been tested, and complies with the limits of FCC testing. Changes, modifications, or disregard of proper installation and instructions not expressly approved by UTC Fire & Security are strictly prohibited by the FCC and could void the user's authority to operate the equipment.

Ordering information

Product	Part numbers
T-200 (3 covers, 18" / 45.7 cm pigtail wire)	TP-RDR-200a
T-200 (3 covers, 84" / 214 cm pigtail wire)	TP-RDR-200b

Note: Each part number includes all three colors of the cover plates (black, charcoal, gray).