IDENTIV

User manual

For

uTrust TS KEYPAD
Version 1.0

Confidential

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Version	1.0
Date	08-May-2015

Document History

Version	Date	Description of Change	Author
1.0	08-May-15	Initial version	Suresh Kumar T

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Contents

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1.0 Introduction

This document details the Physical Access Control Reader **uTrust TS KEYPAD** and its basic user instruction and installation procedures.

2.0 Reader

2.1 Functionality

TS KEYPAD reader is a physical access control smart card reader that can read HF and LF contactless credentials, conforming to the following standards: ISO 14443 A & B, ISO15693 with a keypad pin entry for additional security. The reader can interface with an access control system equipped with a Wiegand or RS485 serial interface. It can also be interfaced with a Host Sever / Control Panel that supports Ethernet interface. User interfaces include RGB LED's and Buzzer.

2.2 Front/Top Casing

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2.3 Back View/plate

Standard version

Connectivity & Standard version

Back plate

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3.0   Product details

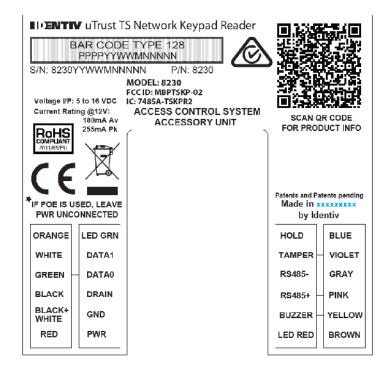|	
Model Name	: uTrust TS keypad
Device Type	: RFID reader, 13.56MHz (HF) / 125 KHz (LF), keypad Physical Access control Reader (accessory equipment)
Type of equipment	: Potted Reader, Suitable for Indoor / Controlled Outdoor use
Interface Type	: Phoenix connectors and RJ45
Voltage Rating	: 5-16V DC (or) 48V DC on RJ45 Connector
Current Rating @12V	: Peak Current – 255 mA, Average Current 180 mA
Communication protocol	: Wiegand, RS485 (2wire - Half Duplex), 10BaseT ETH

4.0   Specifications

Model	Op Voltage	Current @ 12V	Op temp	Cable Length
8230 uTrust TS KEYPAD	5-16 VDC or POE @ 48VDC	Av -180 mA Pk -255 mA	(-35 to 65 Deg C)	RS485 - 4000ft Wiegand -500ft (22AWG) 300ft (24AWG)

5.0   Label

Caution:
During Wiring make sure that the +VDC lines does not make contact with any other cables, as it might affect reader functionality/ cause damage to the reader.

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6.0   Installation details

6.1   Parts List

- TS Keypad reader -1
- Screws (A #6-18X1.5" SS) - 4Nos – Back Plate mounting screws for Wall
- Snake Eye Screw (SMF #6-32X5/16" SS) – 1 No- Top casing mounting security screw
- Screws (SMF #6-32x3/8" SS) - 3 No's - 1 casing to back plate mounting screw and 2 Junction Box   mounting screws
- Nylon anchor plug -4 Nos
- 6 pin phoenix plug (Phoenix connector version only) – 2 Nos
- Back Plate

6.2   Recommended Infrastructure

- Cable Wiegand   - 22AWG for 500Ft / 24AWG for 300Ft with Foil Shield
- Cable RS485   - RS485 for 1000m** (4000ft) 24AWG STP
- Cable RJ45   - Cat5e / Cat6
- Linear DC PS   - 5-16 V, 1A min.
- POE Adaptor Kit   - TL-POE200A

** Tested in lab conditions upto 115Kbaud
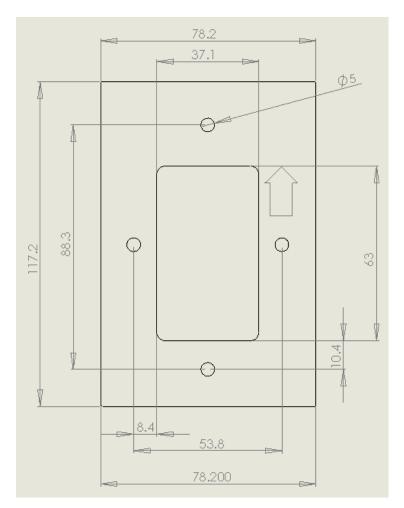
6.3   Connector Information

6.3.1   Pinout diagram

Pin Number	Pin Function	Wire Color
P1.1	LED Green	Orange
P1.2	Wiegand Data 1	White
P1.3	Wiegand Data 0	Green
P1.4	Shield Ground/ Drain	Black
P1.5	Ground	Black & White
P1.6	+ 12 VDC (nominal)	Red
P2.1	Hold	Blue
P2.2	Tamper Output	Violet
P2.3	RS485 –	Grey
P2.4	RS485 +	Pink
P2.5	Buzzer	Yellow
P2.6	LED Red	Brown

Caution:

During Wiring make sure that the +VDC lines does not make contact with any other cables, as it might affect reader functionality/ cause damage to the reader.
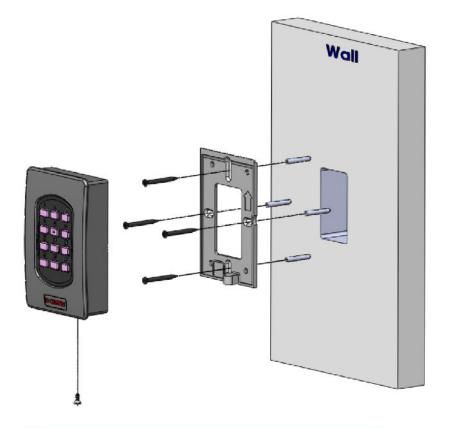
6.4   Mounting the Reader

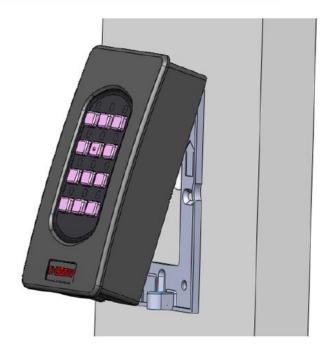### 6.4.1   Location of mounting holes on wall

Phoenix connector Reader – 4 Holes and 1 Slot

6.4.2   Reader Installation Steps

a.   Make holes on the wall as per the image above.
b.   Insert the nylon screw plugs into the wall.
c.   Connect the wires as per the Table 2 or Table 3.
d.   TouchSecure® reader with Bottom Casing is to be now secured onto the wall using the Screws (A #6-18X1.5" SS)
e.   The top casing can be inserted onto the bottom casing
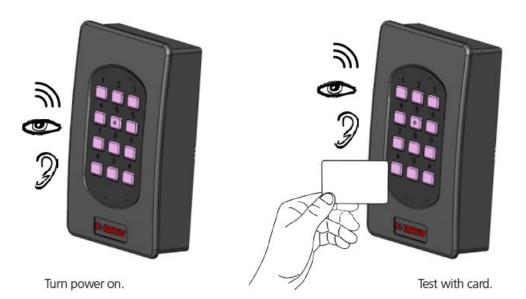f.   Secure the Top and bottom casing by the Snake Eye Screw (SMF #6-32X5/16" SS)

Wall

Install Reader to Backplate

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7.0 Power up and Testing

1 **Turn power on**
   The LED blinks 3 times green with a long beep, then turns red

2 **Present a card**
   The LED blinks green, and a short Beep is emitted

3 **Press Key**
   Buzzer tone & backlight LED blinks

4 **RJ45 Ethernet cable**
   Reader can be powered from POE. Communication happens through Ethernet also.

5 **Wiegand / RS485**
   Communication to the Panel is done through Wiegand / RS485 / OSDP.

This is the default reader behavior.

Turn power on.   Test with card.

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8.0 Certifications

8.1 FCC

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
 (1) This device may not cause harmful interference, and
 (2) This device must accept any interference received, including interference that may cause undesired operation

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

Information to user

Changes or modifications not expressly approved by *Identiv could* void the user's authority to operate the equipment.

8.2 IC

This device complies with Industry Canada license-exempt RSS standard(s).
Operation is subject to the following two conditions:
(1) This device may not cause interference
(2) This device must accept any interference, including interference that may cause undesired operation of the device.