



# CATALOG | 2023



# GET TO KNOW US



Transponder and Reader Engineered Systems, Inc. is a USA owned, privately held company, specializing in technology development of Active and Passive UHF products for the AVI, RFID and perimeter security control industries.

Co-founded in 2011, Transponder and Reader Engineered Systems brings extensive knowledge, product experience and diversity in development of electronic AVI and RFID circuit design and production to our customers. Along with industry veteran sales, marketing and distribution teams necessary to support and expand our product line and product footprint.

Transponder and Reader Engineered System's maintains a production and support facility in Peachtree City, GA. Our full-time testing, technical support and operations center maintains the growth of our high-performance AVI and innovative RFID control products. This provides for solid comprehensive technical support, operations, production and warehousing capacity along with further product development to meet our increased immediate and future customer needs.

Our core products being the 900MHz TRES-Patriot series, the 433MHz TRES433 series along with numerous optional feature enhancements which operate within the following applications;

Passive UHF 900MHz RFID, AVI Perimeter Security Solutions

Active UHF 433MHz RFID Access and Asset Solutions

Long Range Perimeter Gate Entry Control

Parking Gate and Building Access with Multi-technology Credentials

Stand Alone Asset and Valet Application Capabilities

Intelli-track Access/Asset Tracking and Control Software, Windows based compatibility

The Defender, a simple IP-based two-door controller with a flexible design, capable of stand-alone operation or multiple controller expansion over a network for a variety of door/gate control applications.



Technical support

**Our U.S. based tech support team is ready to offer you powerful first contact solutions for all your TRES products!**

**1-888-574-8737**

Orders: Ext. 1  
Tech Support: Ext. 2  
Sales: Ext. 3

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**2023  
Trade Show Schedule**

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**FENCETECH/METALfab**  
February 28th - March 3rd  
Oklahoma City, OK  
Booth #402

**PIE (Parking Industry Expo)**  
March 28th - March 30th  
Schaumburg, IL  
Booth #435

**ISC West**  
March 28th - March 31st  
Las Vegas, NV  
Booth #7089

**IPMI (Parking and Mobility)**  
June 11th - June 14th  
Fort Worth, TX  
Booth #915

## Proudly Partnered With:



# RFID READERS

Passive - Long Range

## PATRIOT SERIES



### PATRIOT L

- 902MHz - 928MHz
- Read Range: 18' - 25'
- RS232
- Supports Multiple Wiegand Bit Formats
- LED Indicator and Relay
- Variable 12 to 48VDC Input Voltage
- Bluetooth and Wifi Options Available



### PATRIOT E

- 902MHz - 928MHz
- Read Range: 18' - 25'
- RS232, RS485, OSDP
- Supports Multiple Wiegand Bit Formats
- LED Indicator
- Variable 12 to 48VDC Input Voltage
- Bluetooth and Wifi Options Available



### PATRIOT M

- 902MHz - 928MHz
- Read Range: 18' - 25'
- Wiegand Only
- LED Indicator
- Variable 12 to 48VDC Input Voltage

\* All Patriot readers come with a power supply, 2" OD mount hardware and 60" pigtail



Designed, Engineered and Assembled in the U.S.A.

# PASSIVE CREDENTIALS

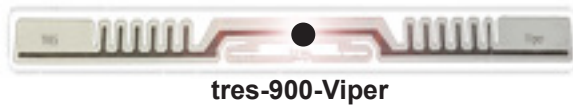
## Hang Tags



## Windshield Tags



## Headlamp/Windshield Tag



## Custom Hang Tags

### Metal Mount Tags



tres-900-Stealth  
ABS Encased Metal Mount Tag

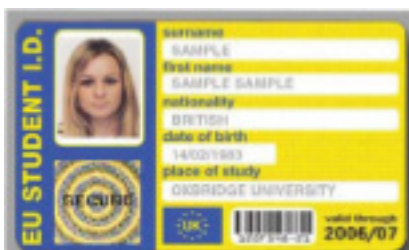


tres-900-HT350-C Hangtag



tres-900-HT600-C Hangtag

## Multi-Technology ISO Cards



tres-900-ISO



tres-tres2smart



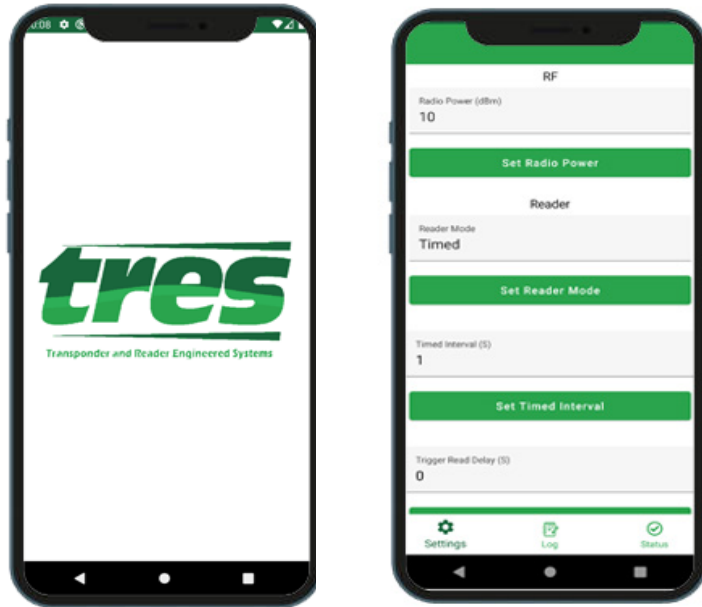
tres-3 Tek



tres-tres2prox

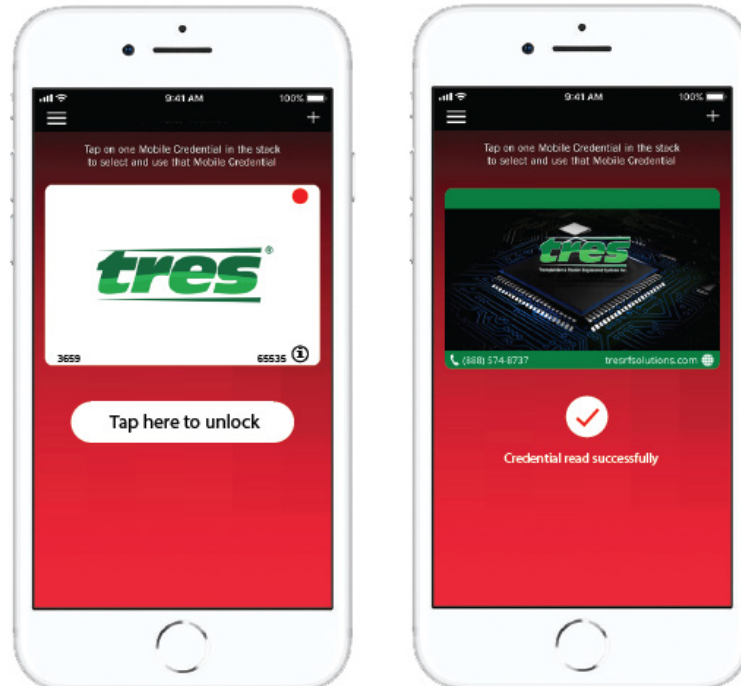
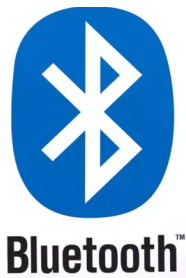
# OPTIONS FOR PATRIOT SERIES READERS

## Tres App For Wifi



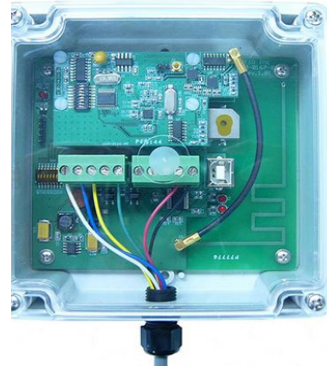
Our RFID readers are capable of a variety of network connectivity options such as TCP/IP, WiFi communications and offer a multiple of available protocols and wireless bluetooth credentials.

## Tres Mobile Credentials For BLE Option



### TRES-433

- Up to 45' read range with internal antenna
- Up to 150' with external antenna
- Auto tune using RSSI value
- Configurable via USB port
- LED indicators
- Piezo On/Off controls
- Available in Wiegand, serial or TCP/IP



### TRES-433 Models

TRES433-RW | Output: 26-Bit Wiegand

TRES433-RS | Output: Serial RS232/485

TRES433-RE | Output: Ethernet TCP/IP

The TRES433 Passive Receiver and our active tags are well suited for Asset Tracking, Vehicle ID, Personnel Tracking and any RFID application where long read ranges are needed. Multiple Antenna options and data output formats make this a flexible and robust option for your RFID needs. The TRES433 passive receiver interfaces easily with Wiegand, Serial or TCP/IP controllers.

The TRES433 active tags have replaceable Lithium-Ion batteries, thereby eliminating the most common issues of having to replace the tag after the battery dies. The TRES433 tags are also available with an accelerometer where the tag will transmit a unique signal when in motion, a feature that is invaluable for theft prevention and monitoring of unguarded assets.



# ACTIVE CREDENTIALS AND OPTIONS



## TRES433-CS or CS-ACL

- Clamshell
- 3.375" x 2.125" x .25"
- Weight: 2oz / 57 grams
- Housing: Sealed ABS, IP65
- Replaceable Lithium Ion Battery



## TRES433-MM or MM-ACL

- Metal Mount
- 3.0" x 2.0" x 1.0"
- Weight: 4oz / 113 grams
- Housing: ABS, metal spacing
- Replaceable Lithium Ion Battery



## TRES433-AT or AT-ACL

- Asset Mount
- 4.0" x 2.125" x .54"
- Weight: 4oz / 113 grams
- Housing: Rynite, Potted, IP67
- \*Non-Replaceable Battery



## TRES433-ANTENNA

- Circular, polarized, antenna, RoHS, CE, IP67 rated with mount bracket



## TRES433-CAB12-BEEFY

- 12' Beefy cable kit, includes adapter for TRES433 Receiver

## TRES433-CAB25-BEEFY

- 25' Beefy cable kit, includes adapter for TRES433 Receiver



## TRES433-ANT-WHIP-KT

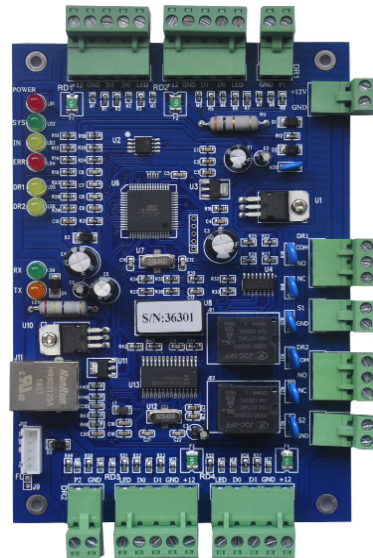
- External antenna with skinny cable



# ACCESS CONTROL

## DEFENDER

- 20,000 users with audit trail
- Handles vehicle and pedestrian gates at the same time
- Remote door release(s)
- Real time processing and communications
- 4 Reader ports ( 2 in, 2 out)
- Diagnostic LED indicators
- TCP/IP based
- Access management software
- Access levels and time zones
- Supplied 3Amp power supply



## DAK Kits

- Save up to 15%
- Our scalable kits provide a lower cost secure access control
- Includes: Defender(s), (you choose) TRES-P-300-HA or TRES-P-500-HA, TRES 100-psm-2P ISO cards, 3A power supply, and an IP65 access control enclosure assembly
- Each enclosure has a clear cover for visual diagnostics, along with a swing-out mounting plate for easy install and maintenance



## DRAK Kits

- Save up to 15%
- Our scalable kits provide a lower cost secure access control
- Includes: Defender(s), Patriot L (or multiple readers), (you choose) TRES-P-300-HA or TRES-P-500-HA, TRES900-ISO-G2PRX cards/tags, 3A power supply, and an IP65 access control enclosure assembly
- Each enclosure has a clear cover for visual diagnostics, along with a swing-out mounting plate for easy install and maintenance

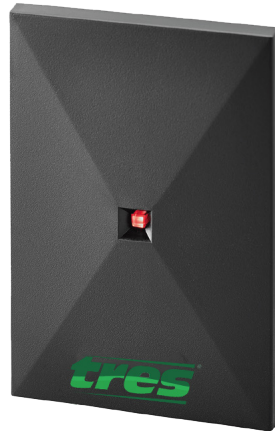
# KEYPADS AND PROX READERS

## TRES-P-300-HA



- Mullion mount reader
- Up to 5" read range
- Ability to read \*Farpointe, \*HID and \*AWID proximity cards
- 12VDC/30mA
- 1.7"W x 3.2"H x 0.7"D

## TRES-P-500-HA



- Switch plate reader
- Up to 8" read range
- Ability to read \*Farpointe, \*HID and \*AWID proximity cards
- 12VDC/35mA
- 3"w x 4.6"H x 0.4"D

## TRES-P-620-HA



- Mullion mount keypad/reader
- Up to 5" read range
- Ability to read \*Farpointe, \*HID and \*AWID proximity cards
- 12VDC/70mA
- 1.78"W x 6.1"H x 0.91"D

## TRES-P-640-HA



- Switch plate keypad/prox reader
- Up to 7" read range
- Ability to read \*Farpointe, \*HID and \*AWID proximity cards
- 120VDC/70mA
- 3"W x 4.6"H x 0.75"D

## TRES-P-710-HA



- Medium range reader
- Up to 15" read range
- Ability to read \*Farpointe, \*HID and \*AWID proximity cards
- 12VDC/215mA
- 6"W x 8.5"H x 1"D

## TRES100 Series



TRES-100-PSM-2P  
(50 pack)

TRES-900-ISO-G2PRX  
(50 pack)



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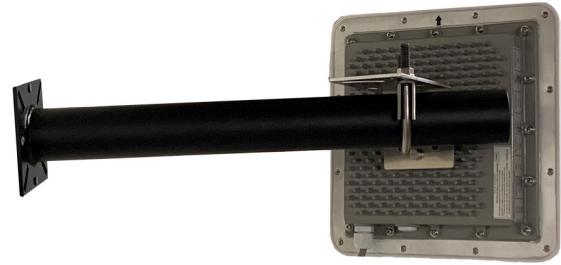
# ACCESSORIES

## TRES-RFID-SS-SWIVEL



- RFID stainless steel swivel bracket
- 2" stainless steel u-bolts
- Stainless steel bolts/nuts

## TRES-RFID-WCM0218-B



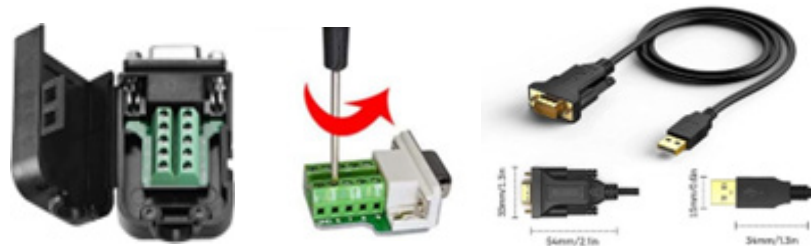
- RFID ceiling/wall mount
- 4" base
- 2" o d x 18", steel
- Black powder coated

## TRES-RFID-PS094-B



- RFID mount stanchion
- Modular
- 2" o d x 94", steel
- Base is hot dipped galvanized
- Black powder coated

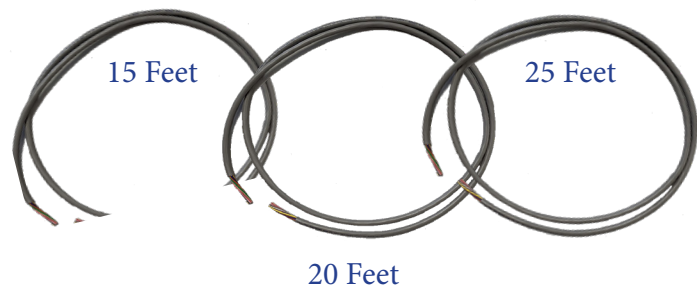
## TRES-900-USB-RS232



Reader Serial Port Service Kit

- USB to Serial Cord
- Male Serial End
- DB9 Female Modular Serial Connector
- 3.3' length

## READER EXTENDED CABLE OPTIONS



**Factory Installed. Must specify optional length at time of reader order.**



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