



Delta5

**Globally Accepted** - ISO 14443 Type A & B compliant

**Multi-Technology** - integrates both 13.56-MHz contactless smartcard and 125-kHz proximity RFID technologies into a single unit

**Secure Contactless Communication** - smartcard encryption secures contactless transmissions

**Versatile Options** - customize reader to fulfill different applications, security needs and system specifications

Farpointe's Delta technology is based on the world popular Mifare platform to offer a globally accepted, secure and versatile access control solution. Delta readers support the most popular smartcard and proximity card technologies for simple system integration and the freedom to target different applications with the most convenient card technology. To ensure the integrity of RF data transactions, data communication between Delta cards and Delta readers is encrypted using a powerful key; furthermore, readers and credentials challenge each others' keys during the validation process. Showcasing Delta's versatility, the readers offer a wide range of adjustable settings to satisfy each customer's individual needs, application requirements, and system specifications.

### Advanced Technology

- 13.56-MHz: Supports Delta Contactless Smartcards, Mifare 1K & 4K, Ultralight (CSN only), DESFire (CSN only)\*
- Supports both sector and card serial number (CSN) reading
- 125-kHz: supports Farpointe's Pyramid Series Proximity® cards and tags, along with optional compatibility with HID and AWID proximity\*
- FIPS201, US Government approved Transparent Reader (supports PIV Types A & B)
- TWIC: reads CHUID data
- Wiegand and magnetic stripe outputs standard

### Strong Security

- Validation process between readers and Delta 1k & 4k credentials\*\*
- RF transactions between reader & Delta 1k & 4k credentials is encrypted
- Customer exclusive encryption keys available for personalized security
- Anti-Tamper Mode available

### Easy Installation

- Mounts to US single-gang wall box or to flat surface. Use spacer enclosed when mounting directly on metal
- Quick installation, with only two mounting screws necessary
- Horizontal and vertical mounting slots standard for alignment
- Modern and slim profile retain building aesthetics
- Electronics are sealed in weather-and tamper-resistant epoxy potting for both indoor and outdoor operation (industry high IP67 rating)

### Additional Features

- Adjustable settings available for reader customization
- External standard four-state LED (red, green, amber, off) and audio tone (beeper) with provisions for both system and local control
- Comes standard with black contemporary cover and stand-off



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### Validation Process



1. Delta reader and credential exchange and compare secure keys.
2. Keys match – Delta reader collects sector data (long beep).
3. Keys do not match – Delta reader collects card serial number (CSN) (quick beep).

Delta readers are able to read the sector (access control) data and/or card serial number from all ISO 14443 Type A & B compliant credentials. Delta credentials meet the ISO standard and are programmed at Farpointe with a Delta compatible secure key\*. During Delta's validation process the credential's secure key is challenged by the reader. If the secure keys match, the reader will read the card's sector data, if the secure keys don't match, the reader will only read the credential's CSN.

\* Delta compatible secure keys are also available for credentials programmed with Farpointe's Delta field programmers assigned to authorized partners

### Specifications

|   |  |
|---|--|
| <b>Dimensions:</b> 4.6" x 3" x 0.4" (166 x 77 x 10 mm)  | <b>Operating Temperature:</b> 40° C to +65 ° C   |
| <b>Current Draw:</b> 160 mA average @ 12VDC w/ 125 kHz enabled  | <b>Cable Distance:</b> Up to 500 ft.   |
| <b>Input Voltage:</b> +5 to 14 VDC (12V nominal)  | <b>Audio Tone:</b> Standard external Piezo beeper  |
| <b>Transmit Frequency:</b> 13.56-MHz & 125-kHz  | <b>LED:</b> Standard external four-state LED   |
| <b>Weight:</b> 4 OZ (113 g)   | <b>Certifications:</b> FCC, CE, C-Tick, ICC  |
| <b>Read Range:</b> 13.56-MHz up to 3.5 inches (8.9 cm)<br>125-kHz up to 3.25 inches (8.3 cm)                      | <b>Credential Compatibility:</b> Delta, Pyramid Series Proximity, Mifare, HID 125-kHz, AWID 125-kHz                |
| <b>Mounting:</b> US single-gang wall box or on flat surface. Use spacer enclosed when mounting directly on metal. | <b>Warranty:</b> All Delta readers carry a limited lifetime warranty against defects in materials and workmanship. |
| <b>Power Supply:</b> Linear supply recommended, 5-14 VDC  |  |



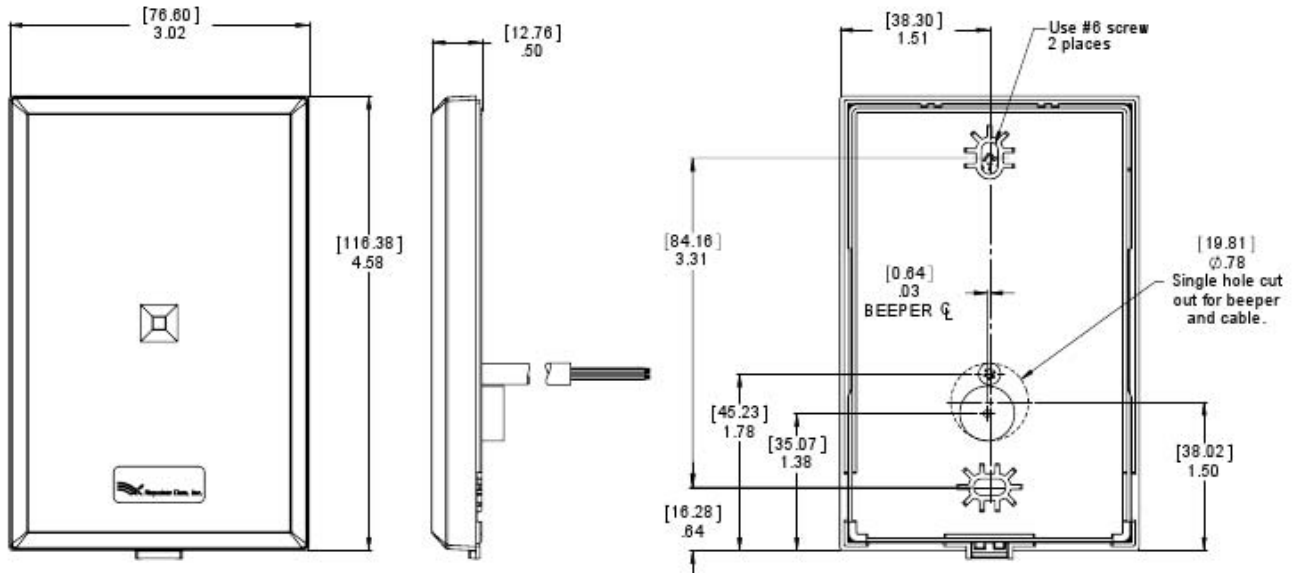
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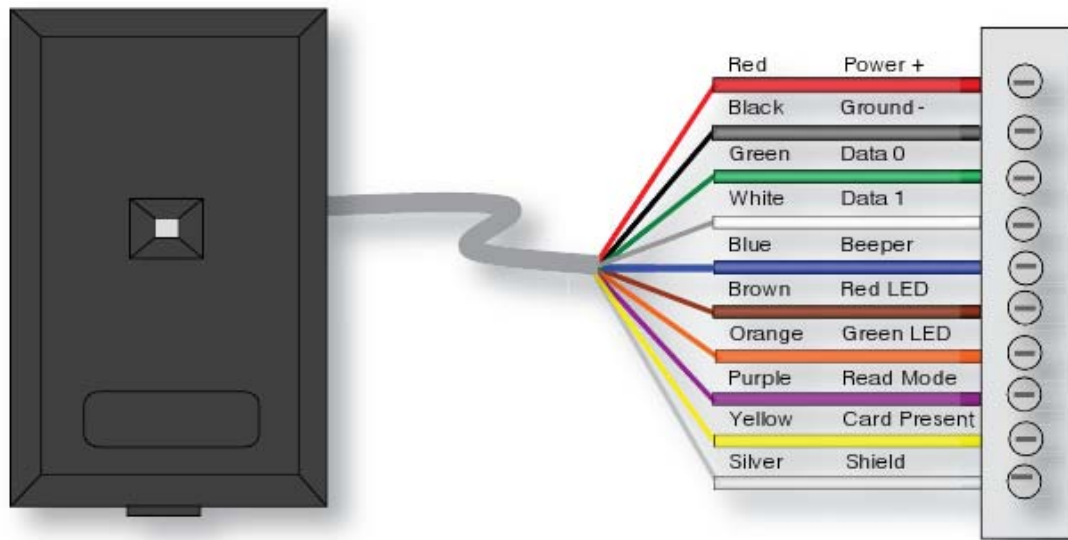
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# Delta5

## Multi-Technology Contactless Smartcard Reader Wall Box Mount



### Wiring Diagram:



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### How to order

To place an order, please contact your access control systems provider or contact the Farpointe Data team at telephone number +1-650-964-2615 or e-mail address [orderentry@pyramidseries.com](mailto:orderentry@pyramidseries.com)

### Model numbers

Delta5 (Standard) - Supports both 13.56-MHz smartcard and 125-kHz proximity technologies, and standard settings (see standard settings table).

Delta5-H - Supports all standard settings with additional 125-kHz HID proximity compatibility.

Delta5-A - Supports all standard settings with additional 125-kHz AWID compatibility.

Delta5 (Custom) - Delta readers offer a number of adjustable settings. Please fill the adjustable settings table to customize your reader.

### Standard Settings

|                              |   |                                 |  |
|------------------------------|---|---------------------------------|--|
| <b>LED</b>                   | 1 line (red LED flashes on card presentation) | <b>Beeper</b>                   | Reader will beep on card presentation          |
| <b>Output Format</b>         | TTL Wiegand or Magnetic Stripe                | <b>Read Mode</b>                | Sector or CSN                                  |
| <b>CSN Output</b>            | 32-bit Wiegand                                | <b>Wiegand Output</b>           | TTL  |
| <b>125-kHz Compatibility</b> | Pyramid Series credentials                    | <b>FIPS 201 Reading</b>         | Reads both FIPS (75-bit CSN output) and Milare |
| <b>PIV Baud Rate</b>         | 106 kbps                                      | <b>Wiegand Keypad Data Mode</b> | 8-bit burst                                    |
| <b>Keypad Sense Level</b>    | Level 1 (lowest sensitivity)                  | <b>Key &amp; AID</b>            | Farpointe's Default                            |

### Adjustable Settings

| Setting                            | Description  | Change (x) |
|------------------------------------|--|------------|
| <b>Magnetic Stripe Format Lock</b> | Locks reader data transfer to magnetic stripe format only.   |            |
| <b>Wiegand Format Lock</b>         | Locks reader data transfer to TTL Wiegand format only.   |            |
| <b>Sector Only Mode</b>            | Reader only reads sector data. Will not read the card's CSN.   |            |
| <b>26-bit CSN Mode</b>             | Reader outputs CSN in 26-bit Wiegand format.   |            |
| <b>34-bit CSN Mode</b>             | Reader outputs CSN in 34-bit Wiegand format.   |            |
| <b>40-bit CSN Mode</b>             | Reader outputs CSN in 40-bit Wiegand format.   |            |
| <b>Reverse CSN</b>                 | CSN is output LSB to MSB.  |            |
| <b>Open Collector Wiegand</b>      | Reader may be placed into open collector Wiegand output mode.  |            |
| <b>FIPS Only Mode</b>              | Reader will only read and output PIV and TWIC tags.  |            |
| <b>MAXSecure</b>                   | Adds a security handshake for both Delta cards and Pyramid Series proximity cards.                               |            |
| <b>Dual LED Mode</b>               | Single line LED is toggled to dual LED (red and green).  |            |
| <b>Beeper Suppress</b>             | Reader will not beep upon card presentation.   |            |
| <b>LED Suppress</b>                | LED will not flash or change color upon card presentation.   |            |
| <b>Anti-Tamper</b>                 | Enable Anti-Tamper mode. Available with Wiegand output only. Additional hardware necessary.                      |            |
| <b>125-kHz</b>                     | Disable 125-kHz compatibility.   |            |
| <b>HID Proximity Compatibility</b> | Enable HID 125-kHz compatibility.  |            |
| <b>AWID Prox compatibility</b>     | Enable AWID 125-kHz compatibility.   |            |
| <b>Output Sector + CSN</b>         | reader will append the CSN of the programmed Delta card onto the Wiegand output of the access control data.      |            |
| <b>PIV Baud Rate</b>               | Different baud rates available. Default 106 kbps. 212 and 424 kbps rates available.                              | Rate:      |
| <b>Keypad Sense Level</b>          | 3 different sensitivity levels available. Level 1 comes standard. Level 2 and Level 3 available.                 | Level:     |
| <b>PIV/TWIC Output</b>             | Available in 75-bit, 200-bit, and 245-bit.   | Output:    |
| <b>Key and AID update</b>          | configures the Delta AIDs, Keys, and sectors to read. Please provide update. <b>Key:</b> _____ <b>AID:</b> _____ |            |

NOTE: To learn more about Delta features and settings reference the Delta settings document posted on our website.



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