# I PENTIV

# uTrust UHF Credentials

Frictionless, Long-Range Identification Solution



Identiv's frictionless, batteryless uTrust UHF Credentials work with identification applications that require long-distance reading.

uTrust UHF Credentials provide multiple options for durable, interoperable radio frequency identification (RFID) cards. Ultra high frequency (UHF) technology (operating in the 860 - 960 MHz frequency range) delivers outstanding performance for long-distance, multiple, reliable readings of credentials, including cards and tags. Leveraging the short wavelength of UHF technology, they are the ideal solution for reading people or items from a significant distance, more than 18 - 21 feet.

UHF technology is convenient and commonly used for parking lot access and gate control, physical access control system (PACS) solutions (i.e., door entry in hospitals or gated communities), logistics, asset

management (i.e., object and people tracking in emergency situations), real-time locationing, cafeteria access, and any hands-free environments, including medical or care facilities. Other applications include club and resort membership, sport facilities (i.e., ski slopes), and universities.

Identiv's designs can leverage UHF technology to read through badge holders, handbags, pockets, and backpacks. uTrust UHF Credentials can keep track of people to increase personal safety and facility security, capture guest/visitor data, and can support 125 KHz low frequency (LF) and/or 13.56 MHz high frequency (HF) interfaces.

### **Hands-Free RFID**

- UHF/LF/HF programmable with data formats to match existing infrastructure
- Supports standard use cases for UHF and PACS

### **Works With Existing Credentials**

- Proven 900 MHz RFID technology with consistent long read range
- Combined with LF and/or HF

## **Standards-Compliant**

- EPC Class-1 Generation-2, ISO/IEC 18000-63:2013, and RAIN UHF RFID-compliant
- Wide compatibility with existing UHF readers on the market (i.e., handheld, stationary, or desktop)

### **Cost-Effective**

- Printable cards with passive read/write RFID design
- Works with with major card printer models



# Specifications

|                                         | ISO PVC UHF LF Card                                                                                                                                                                                                                                                                                                                                                                                                                      | ISO PVC UHF DESFire EV2 2K Card                                                                                                               |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| RFID Interface                          | <ul> <li>Broadband support for contactless frequency range around the world (860 - 960 MHz)</li> <li>Programmable with different PACS formats (ie., 26, 35, 37 bits, etc.)</li> </ul>                                                                                                                                                                                                                                                    |                                                                                                                                               |
| UHF Chip and Memory                     | <ul> <li>Alien H3 (other chips may also be used)</li> <li>800 bits of memory, 96 EPC bits extensible to 480 bits, 512 user bits, 64-bit unique TID (unalterable serial number)</li> <li>32-bit access and 32-bit kill passwords</li> <li>User memory can be block perma-locked or read-password protected in 64 bit blocks</li> </ul>                                                                                                    |                                                                                                                                               |
| Credential Form Factor and Dimensions   | <ul> <li>ISO Card (ID1 Format) and ISO7810 format</li> <li>3.37 x 2.125 x 0.030 in (85.6 x 54 x 0.84 mm)</li> <li>Thickness 30 mm +/- 3 mml</li> </ul>                                                                                                                                                                                                                                                                                   |                                                                                                                                               |
| Weight                                  | 0.15 oz (4.3 g)                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                               |
| Read Range<br>(with UHF Reader 2 Watts) | 18 - 21 ft (6 - 7 meters)                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                               |
| Slot Punch                              | Not supported                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                               |
| Operating Temperatures                  | -50° to 160° F (-45° to 70° C)                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                               |
| Material                                | PVC with quality surface for use with most card printers on the market                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                               |
| Options                                 | <ul> <li>Magnetic stripe three tracks (HICO123)</li> <li>Black, pre-printing CMYK, or Pantone colors</li> <li>Special encoding available on demand for compatibility with UHF readers</li> </ul>                                                                                                                                                                                                                                         |                                                                                                                                               |
| LF/HF Specifics                         | LF 125 KHz with capabilities identical to uTrust Proximity Credentials                                                                                                                                                                                                                                                                                                                                                                   | HF 13.56 MHz with NXP DESFire EV2 2K (non-programmed by default) Configuration with uTrust TS Card encoding on DESFire (available by request) |
| Part Number                             | 99-017-UHF-LF                                                                                                                                                                                                                                                                                                                                                                                                                            | 99-090-UHF-HF-DFEV2-2K                                                                                                                        |
| Product Image                           | 35 [0.197] 85 69 [3.374] 73 [2.874] 30 [1.191] 30 [1.191] 30 [1.191] 30 [1.191]                                                                                                                                                                                                                                                                                                                                                          | 73 [2.874]  73 [2.874]  73 [2.874]                                                                                                            |
| Supported UHF Readers                   | <ul> <li>Wiegand interface (i.e., NEDAP uPASS Access Reader, IDTek RF900, FEIG ID LRU500i-BD-FCC UHF Compact Reader with integrated antenna, and TRES Reader Family 9v00)</li> <li>Other brands (i.e., TRES Reader Family 900)</li> <li>ASReader for iOS and Android mobile devices (i.e., ASR-0230D (FCC/US) 902.75~927.25 MHz) or desktop readers (i.e., ASR-P30U)</li> <li>Thinkify (i.e., TR-265 USB Desktop RFID Reader)</li> </ul> |                                                                                                                                               |
| Lifetime Warranty                       | For material defects and workmanship under normal wear and tear                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                               |