



## CryptoRF® 64-bit Encryption with Dual Authentication

High Frequency RFID contactless cards are designed for use in a multitude of “contact” identity and payment systems. Yet the tags (the ‘card’) and the readers have limited security - the security resides largely in a database those cards access.

To provide high quality encryption, Proxima RF™ has partnered with Atmel to make our readers CryptoRF® compatible. CryptoRF® technology provides true security by combining secure 64 bit encrypted 13.56 MHz HF RFID memory tags with client side security with secure readers. We offer both ready-to-ship and custom mobile and fixed readers with CryptoRF® capability, ideal for affordable security in close range RFID solutions.

### Key Security Features:

- Dual authentication ensures both tag and reader are genuine
- Unique ‘signatures’ which are never transmitted or accessed
- Key diversification scheme limits attacks to one unit rather than the system



### SAVE TIME WITH SUPERIOR HARDWARE SECURITY

Proxima RF™ offers the only FCC approved RFID Reader using CryptoRF® protocols, providing hardware security superior to any competing software solution. By including the security in the hardware rather than developing a software solution, you shorten application development times.

CryptoRF® devices create unique “signatures” based on information that is never transmitted or allowed to be accessed in any way, making it virtually impossible to copy. Using authentication keys, session encryption keys and random numbers rather than an easily captured password, CryptoRF® generates a unique identity, for each transaction. The host reader and the CryptoRF® device must both be able to duplicate each other’s identity before any data can be accessed or written.

### THE RIGHT TAGS FOR YOUR SOLUTION



Proxima RF can provide CryptoRF® tags in assorted form factors depending on your solution requirement. Whether you need ID badges, keyfobs, bottle caps or wristbands, Proxima RF can help develop your idea into a pilot project and beyond.



CryptoRF Doc v2.03