

The Technology Behind Pyramid Series Proximity

Pyramid Series Proximity is a low frequency, non-contact, identification solution based upon the latest techniques in radio frequency identification (RFID). It is comprised of two principle components:

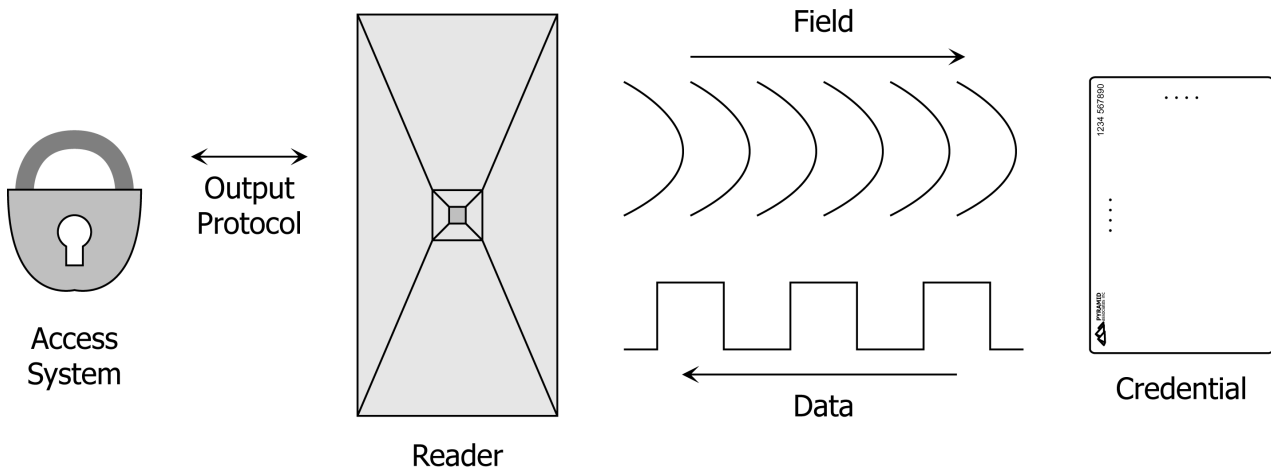
- Proximity Readers
- Proximity Credentials (commonly referred to as proximity cards and tags)

The proximity reader has a receiver circuit, a microprocessor, and a magnetic coil. A proximity credential has a highly reliable radio frequency integrated circuit (RFIC), coupled with a magnetic coil inside a durable, environmentally secure plastic housing.

In operation, Pyramid Series readers generate an electromagnetic field tuned to 125 kHz, an internationally recognized radio frequency for low power data communications. When a credential enters this field, the credential's internal RFIC is activated. The RFIC then transmits its unique data back to the reader as an encoded modulated signal.

The encoding of this signal is comprised of a patented data algorithm that uses a byte parity error detection scheme, providing extremely fast, accurate, and secure transmissions of up to 64 bits of user-definable data.

The reader then processes the credential's data in either a Wiegand or ABA Track II magnetic stripe format, both electronic security industry standard output protocols, and forwards the data to the access control system. This is all completed normally within just 65 milliseconds.



According to national and international regulatory requirements, Pyramid Series Proximity is FCC certified (both N42KERI1000 & N42KERI2000), and carries both the CE Mark for the European Union (conformity to the latest requirements of Directive 1999/5/EC) and the C-Tick label for Australia and New Zealand.