

PCI Compliant Read Head

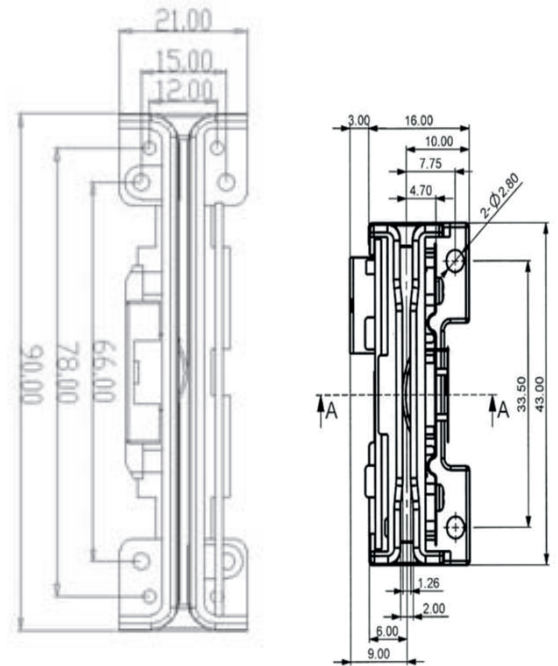
MMD-1901/1902 – 90mm Track

Overview:

MMD1901/1902 integrates the magnetic card reader function with data encryption. Upon reception of the magnetic head signals, the card data is recovered, encrypted, and transferred to the external device via universal asynchronous receiver and transmitter (UART) or serial peripheral interface (SPI). It supports up to 3 track card reading at the same time. Signal processing techniques are employed to recover F2F encoded data reliably from head signals with severe fluctuation of signal amplitude, widely varying bit interval, and jittery bit position. The recovered data is encrypted with the 128 bit AES.

Features:

- Wide Range of Card Swipe Speeds: from 5 to 150 cm/s
- Signal Conditioning Adapted to Head Signal
- Flexible External Interface: UART or SPI
- ISO/IEC 7811 and Binary Data Format Support
- Encrypt all Track Data
- Power Down Mode for Low Power Consumption
- Full Three Tracks Support
- Secure Data Transfer with 128 bit AES Encryption: CBC Mode
- DUKPT key management (Derived Unique Key Per Transaction)
- Digital Signal Processing for Superior Data Recovery Performance
- Development Kits Available



Technical Specifications:

| | |
|-----------------------|---------------------------------|
| Card Standard | ISO 7810/7811 and AAMVA |
| Card Speed | 10 ~ 120 cm/sec (4-50 inch/sec) |
| Head Life Time | 300,000 passes minimum |
| Operating Temperature | -40°C ~ +70°C |
| Storage Temperature | -40°C ~ +70°C |
| Power Input | 3.0 – 3.6 VDC |
| Interface | SPI (Option: UART) |
| Message Format | ASCII |