Act KDE, Inc. designs and manufactures a various range of Automatic Identification products, components, and AFC (Automatic Fare Collection) System which include Magnetic Stripe, IC and RF Card/Token Reader/Writers. Act KDE, Inc. supports their customers with standard & customized products for Hospitality, Access Control, Public Transportation, Gaming, Banking Automation and Kiosk Industries. In Public Transportation, Act KDE, Inc. Involved the U-payment Project in Gwangju-City [the third largest city in Korea] and installed Act KDE's high technology solution and also supplied the Special Ticket Vending Machine for seniors to Gwangju Metro-City Subway in 2010. Our products are provided through OEMs, distributors, and directly to major end users. Our products feature rich and provide practical, economical solutions to customers’ needs.

Act KDE, Inc. has established a reputation for technical excellence through its development of reliable & innovative products. Customers are sincerely supported by experienced sales representatives & a knowledgeable technical support team. Customer service & satisfaction are key factors in our position and growth in the industry.

Act KDE, Inc. is an ISO 9001: 2008 registered company. Our quality commitment is the involvement of all our employees to communicate improvements & concerns about products & services in order to improve continually. Our employees view our products & services from customers’ perspective to provide competitive products & services that meet all customers’ requirements.

The headquarter, manufacturing facility for motorized type of Reader/Writer and R&D are located in Seoul, Korea. Also we have our own factory for the other types of product, such as Manual Swipe & Insertion type of reader, Card Dispenser, Card Issuing Module and so forth, in Shenzhen, China. Act KDE, Inc. has various Sales channels in North & South America, Asia, and Europe with distributors worldwide.

Our Vision is to design and manufacture highly reliable products used in automated data collection & identification applications; and, to support our customers with product application assistance & services. The results are highly reliable and immediate, convenient customer services.

Our Goal is to make Act KDE, Inc. your first choice for Auto-ID products. Whenever you reside on the Globe, Act KDE, Inc. will be nearby to assist you with orders, technical supports and questions you may have about us and our product offering.
Contents

- Motorized Reader/Writer
- Motorized Reader
- Hybrid Reader
- Manual Swipe Reader
- Manual Swipe Reader/Writer
- Manual Insertion Reader
- Card Issuing Module / Card Dispenser
- Multi-Functional Ticket Issuer
- RF Module
- RF Reader/Writer
- Head Assembly
EDM-4000 Series

EDM-4000 is a motorized insertion type of MS & IC card Reader/Writer module with RS-232C interface which encodes/decodes data on triple tracks of MS & IC card in accordance with ISO 7810, 7811/7816. This is the high reliable and durable device, and its mechanism offers accurate and efficient card encoding for customer business and their industrial application.

Features
- Mag. stripe card Read/Write
- IC contact card Read/Write
- T=0, T=1 protocol (default) / Customized protocol available
- EMV level 1 / PBOC
- Write LoCo / HiCo
- Electric or mechanical shutter available
- 4 x SAM (option)
- Anti-skimming
- Triple DES Encryption
- Easy to upgrade firmware
- Cycle counting for head, solenoid, flash write
- Motor speed control in case of MS read error
- Serial No. display in test program

Application
- ATM / Cash dispenser
- Vending Machine
- Kiosk [information & payment]
- POS system
- Door lock system
- Parking lot system
- Highway tollgate system

Specification

<table>
<thead>
<tr>
<th>Card Standard</th>
<th>Magnetic</th>
<th>IC</th>
<th>ISO 7810, 7811</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>ISO/IEC 7816, SLE4418/28, SLE4442</td>
</tr>
<tr>
<td>Power</td>
<td>DC 24V ± 10% (default) / DC 12V ± 10% (option)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>TTL / RS-232C / USB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Time</td>
<td>Mag. Head</td>
<td>Min. 2,000,000 cycles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IC contacts</td>
<td>Min. 700,000 contacts</td>
<td></td>
</tr>
<tr>
<td>Feeding Speed</td>
<td>300 mm/sec ± 10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>Operation</td>
<td>5–50°C / 20–90%RH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Storage</td>
<td>-20–70°C / 0–90%RH</td>
<td></td>
</tr>
<tr>
<td>Dimension</td>
<td>129 x 82 x 207 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Model Name Configuration

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1: RS-232C &amp; USB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5: 12V</td>
<td>7: 24V</td>
<td></td>
<td>8: ISO-162 trk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9: Customized</td>
<td></td>
<td></td>
<td>9: ISO-162&amp;3 trk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0: IC only</td>
<td>1: ISO 1 trk</td>
<td></td>
<td>0: Without shutter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2: ISO 2 trk</td>
<td>3: ISO 3 trk</td>
<td></td>
<td>1: With electronic shutter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4: ISO-162 trk</td>
<td>6: ISO-263 trk</td>
<td></td>
<td>6: With IC Contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8: ISO-162&amp;3 trk</td>
<td></td>
<td>7: With IC Contact + electronic shutter</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9: LoCo / HiCo auto selection [W/IC]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ESM-4000 Series

ESM-4000 is a motorized insertion type of MS & IC card Reader/Writer module with RS-232C interface which encodes/decodes data on triple tracks of MS & IC card in accordance with ISO 7810, 7811/7816.

This motorized type of reader/writer is focused on reducing the dimension and it has high reliability & durability, and its mechanism offers accurate and efficient card encoding for customer business and their industrial applications.

Features

- Slim type
- Mag. stripe card Read/Write
- IC contact card Read/Write
- RF card Read/Write (option)
- T=0, T=1 protocol (default) / Customized protocol available
- EMV level 1
- Write LoCo / HiCo
- Electric or mechanical shutter available
- Anti-skimming
- Triple DES Encryption
- Easy to upgrade firmware
- Cycle counting for head, solenoid, flash write
- Serial No. display in test program

Specification

| Card Standard | Magnetic | IC        | ISO/IEC 7816, SLE4442, 28, SLE4442 |
|               | RF       | Mifare, ISO-14443 Type A,B |
| Power         | DC 24V ± 10% (default) / DC 12V ± 10% (option) |
| Communication | TTL / RS-232C / USB |
| Life Time     | Mag. Head | Min. 2,000,000 cycles |
|               | IC contacts | Min. 700,000 contacts |
| Feeding Speed | 280 mm/sec + 20% |
| Environment   | Operation | 5 ~ 50°C / 20 ~ 90%RH |
|               | Storage   | -20 ~ 70°C / 0 ~ 90%RH |
| Dimension     | 99 x 59 x 192 mm |

Model Name Configuration

|----------------------|--------------|-----------------------------------|--------------------------|

Application

- ATM / Cash dispenser
- Vending Machine
- Kiosk (information & payment)
- POS system
- Door lock system
- Parking lot system
- Highway tollgate system

Knowledge Digital E-commerce

Motorized Reader/Writer
EDT-4000 Series

EDT-4000 is a motorized type of MS & IC card Reader/Writer terminal with RS-232C interface which encodes/decodes data on triple tracks of MS & IC card in accordance with ISO 7810, 7811, 7816. The housing was designed simple and straightforward to give the impression of a quality product similar to those used on most personal computers and it has a built-in power supply (free voltage) and LEDs which indicate the status of its operation.

Features
- Mag. stripe card Read/Write
- IC contact card Read/Write
- T=0, T=1 protocol (default) / Customized protocol available
- EMV level1 / PBOC
- Write LoCo / HiCo
- Anti-skimming
- Triple DES Encryption
- Easy to upgrade firmware
- Cycle counting for head, solenoid, flash write
- Motor speed control in case of MS read error
- Serial No. display in test program

Application
- Door lock system
- Parking lot system
- Highway tollgate system

Specification

<table>
<thead>
<tr>
<th>Card Standard</th>
<th>Magnetic</th>
<th>ISO 7810, 7811</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC</td>
<td></td>
<td>ISO/IEC 7816, SLE4418/28, SLE4442</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power</th>
<th>AC 110<del>220V, 50</del>60Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>RS-232C / USB</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Life Time</th>
<th>Mag. Head Min. 2,000,000 cycles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IC contacts Min. 700,000 contacts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feeding Speed</th>
<th>300 mm/sec + 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>Operation 5<del>50°C / 20</del>90%RH</td>
</tr>
<tr>
<td></td>
<td>Storage 0<del>70°C / 0</del>90%RH</td>
</tr>
<tr>
<td>Dimension</td>
<td>171 x 137 x 252 mm</td>
</tr>
</tbody>
</table>

Model Name Configuration

|----------------------|-----------------|-------------|----------------|--------------|------------------|-------------------|--------------|-------------|-------------|-------------|-------------|-------------|
EST-4000 Series

EST-4000 is a motorized slim type MS & IC card Reader/Writer terminal with RS-232C & USB interface which encodes/decodes data on triple tracks of MS and IC card in accordance with ISO 7810,7811/7816. It has a built-in power supply (free voltage) and LEDs which indicate the status of its operation and the housing was designed slim and it provides high durability and reliability forward to give the impression of a quality product similar to those used on most personal computers.

Features

- Mag. stripe card Read/Write
- IC contact card Read/Write
- T=0, T=1 protocol (default) / Customized protocol available
- EMV level1
- Write LoCo / HiCo
- Anti-skimming
- Triple DES Encryption
- Easy to upgrade firmware
- Cycle counting for head, solenoid, flash write
- Serial No. display in test program

Specification

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Card Standard</td>
<td>Magnetic, ISO 7810, 7811</td>
</tr>
<tr>
<td></td>
<td>IC, ISO/IEC 7816, SLE4418/28, SLE4442</td>
</tr>
<tr>
<td>Power</td>
<td>AC 110<del>220V, 50</del>60Hz</td>
</tr>
<tr>
<td>Communication</td>
<td>RS-232C / USB / LAN</td>
</tr>
<tr>
<td>Life Time</td>
<td>Mag. Head</td>
</tr>
<tr>
<td></td>
<td>IC contacts</td>
</tr>
<tr>
<td>Feeding Speed</td>
<td>280 mm/sec + 20%</td>
</tr>
<tr>
<td>Environment</td>
<td>Operation</td>
</tr>
<tr>
<td></td>
<td>Storage</td>
</tr>
<tr>
<td>Dimension</td>
<td>148 x 100 x 225 (mm)</td>
</tr>
</tbody>
</table>

Application

- Door lock system
- Parking lot system
- Highway tollgate system

Model Name Configuration

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>0: T=0</td>
<td>1: T=1</td>
<td>2: T=0 &amp; T=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
New EST-4000 Series

New EST-4000 is a motorized slim type MS & IC card Reader/Writer terminal with RS-232C & USB & LAN interface which encodes/decodes data on triple tracks of MS and IC card in accordance with ISO 7810, 7811/7816. Its compact housing is specially designed to meet the latest trends, and its mechanism offers accurate and efficient card encoding for hotel keycard issue, kiosks, payment system, etc.

Features

- Mag. stripe card Read/Write
- IC contact card Read & Write
- RF card Read & Write (13.56Mhz)
- T=0, T=1 protocol (default) / Customized protocol available
- EMV level 1
- Write LoCo / HiCo
- LED & LCD Display
- Easy to upgrade firmware
- Anti-skimming
- Triple DES Encryption
- Cycle counting for head, solenoid, flash write
- Serial No. display in test program

Application

- Door lock system
- Parking lot system
- Highway tollgate system

Specification

<table>
<thead>
<tr>
<th>Card Standard</th>
<th>Magnetic</th>
<th>ISO 7810, 7811</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IC</td>
<td>ISO/IEC7816-3:1997</td>
</tr>
<tr>
<td></td>
<td>RF</td>
<td>Mifare, ISO14443 Type A/B</td>
</tr>
<tr>
<td>Power</td>
<td>AC 110<del>220V, 50</del>60Hz</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>RS232C / USB / LAN</td>
<td></td>
</tr>
<tr>
<td>Life Time</td>
<td>Mag. Head</td>
<td>Min. 2,000,000 cycles</td>
</tr>
<tr>
<td></td>
<td>IC contacts</td>
<td>Min. 700,000 contacts</td>
</tr>
<tr>
<td>Environment</td>
<td>Operation</td>
<td>5<del>50°C / 20</del>90%RH</td>
</tr>
<tr>
<td></td>
<td>Storage</td>
<td>-20<del>70°C / 0</del>90%RH</td>
</tr>
<tr>
<td>Dimension</td>
<td>136 x 123 x 286 (mm)</td>
<td></td>
</tr>
</tbody>
</table>
ESM-5000 Series

This compact size motorized insertion type of card Reader provides high reliability and space saving, and its mechanism offers accurate and efficient card reading for kiosks, payment system, parking system, etc. as it has a robust design and superior components withstands the most severe operation condition. Various options provide high flexibility to customers in accordance with applications.

Features
- Mag. stripe card Read
- IC contact card Read/Write
- T=0, T=1 protocol (default) / Customized protocol available
- EMV level 1 / PBOC
- Electric shutter available
- Anti-Skimming
- Triple DES Encryption
- Easy to upgrade firmware
- Cycle counting for head, solenoid, flash write
- Serial No. display in test program

Application
- ATM / Cash dispenser
- Vending Machine
- Kiosk (information & payment)
- POS system

Specification
<table>
<thead>
<tr>
<th>Card Standard</th>
<th>Magnetic</th>
<th>ISO 7810, 7811</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC</td>
<td>ISO/IEC7816-3:1997</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power</th>
<th>DC 24V ± 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>TTL / RS-232C / USB</td>
</tr>
<tr>
<td>Life Time</td>
<td>Min. 500,000 cycles</td>
</tr>
<tr>
<td>Mag. Head</td>
<td>Min. 700,000 contacts</td>
</tr>
<tr>
<td>IC contacts</td>
<td></td>
</tr>
<tr>
<td>Feeding Speed</td>
<td>350 mm/sec + 20%</td>
</tr>
<tr>
<td>Environment</td>
<td>Operation 5<del>50°C / 20</del>90%RH</td>
</tr>
<tr>
<td></td>
<td>Storage -20<del>70°C / 0</del>90%RH</td>
</tr>
<tr>
<td>Dimension</td>
<td>90 x 66 x 163 (mm)</td>
</tr>
</tbody>
</table>

Model Name Configuration

|---------------------|--------------|-------|-----------|---------------|-------------|----------------------|-----------------------|---------------------|-------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
EDM-9600 Series

EDM-9600 decodes up to three tracks of magnetic data as well as reads/writes to smart cards. This industry standard footprint insertion type of reader is used throughout the world in self-service, payphone, and banking applications for more than a decade. This hybrid insertion type of reader has the lower power consumption compared to the solenoid locking system and it provides reliability and durability in any self-service application.

Features
- Mag. Stripe card Read
- IC contact card Read/Write
- T=0, T=1 protocol
- EMV level 1
- Motor locking
- 1 x SAM / 4 x SAM module (option)
- LED indicators
- Easy to upgrade firmware
- Triple DES Encryption

EDM-9800 Series

EDM-9800 is a manual insertion type of MS & IC card reader and it reads up to three tracks of MS data and reads/writes IC card. EDM-9800 can be easily programmed & configured to match application and communication requirements from customers. It combines MS & IC card reading capabilities into a compact solution, and will be your ideal choice for demanding OEM applications.

Features
- Mag. stripe card Read
- IC contact card Read/Write
- T=0, T=1 protocol
- EMV level 1
- Solenoid locking
- USB interface & USB Powered (5V)
- LED indicators
- Triple DES Encryption
- Easy to upgrade firmware

Application
- ATM / Cash dispenser
- Vending Machine
- Kiosk (information & payment)
- POS system

Model Name Configuration

|---------------------|-----------------|-------|-----------|------------------|----------------|------------------|--------|-------------|-------------|-------------|---------------|---------------|----------------|-------------|-----|

Specification

<table>
<thead>
<tr>
<th>Card Standard</th>
<th>Magnetic</th>
<th>ISO-7810,7811</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC</td>
<td>ISO-7816</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power</th>
<th>DC 5V ± 5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>TTL / RS232C / USB</td>
</tr>
<tr>
<td>Life Time</td>
<td>Mag. Head Min.500,000 cycles</td>
</tr>
<tr>
<td></td>
<td>IC contacts Min.700,000 contacts</td>
</tr>
<tr>
<td>Environment</td>
<td>Operation 5<del>50°C / 0</del>90%RH</td>
</tr>
<tr>
<td></td>
<td>Storage -20<del>70°C / 0</del>90%RH</td>
</tr>
<tr>
<td>Dimension</td>
<td>99 x 73 x 120 [mm]</td>
</tr>
</tbody>
</table>
KDR-1000 Series

KDR-1000 is a Magnetic Stripe Reader for OEM applications. It reads up to three tracks of data with a single swipe in bi-direction. Its various sizes and mounting options make it a perfect fit for reading magnetic stripes in any OEM application. It has reliable Magnetic Stripe reading rate on damaged or warped cards. This reader is available in custom configurations including intelligent interfaces, and custom cable/connector options.

Features

■ ISO-1,2,3 Full Track Read (LoCo / HiCo)
■ Bi-directional read capability
■ Various sizes and multiple standard footprints
■ Special custom configurations are available
■ Ivory color is available at option
■ Cover is available at option (KDR-1100 & 1300)
■ RS-232C is available at KDM-1480 only

Application

■ ATM
■ Vending Machine
■ Kiosk (information & payment)
■ POS system

Model Name Configuration

<table>
<thead>
<tr>
<th>KD</th>
<th></th>
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</tr>
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<tbody>
<tr>
<td>R: TTL</td>
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<td></td>
</tr>
<tr>
<td>M: RS232C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1: 20.5x99.5x25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3: 27x100x28.5</td>
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<td></td>
</tr>
<tr>
<td>4: 21x90x24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5: 23x43.5x23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8: 36x214x35</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>9: Customized</td>
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<td>1: ISO-1 trk</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2: ISO-2 trk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3: ISO-3 trk</td>
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<tr>
<td>5: ISO-1&amp;2 trk</td>
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</tr>
<tr>
<td>6: ISO-2&amp;3 trk</td>
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<td></td>
</tr>
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<td>8: ISO-1&amp;2&amp;3 trk</td>
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<td></td>
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<td>0: No option</td>
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<td>1: With cover</td>
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<tr>
<td>2: With GND Lug</td>
<td></td>
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</tbody>
</table>
Knowledge Digital E-commerce

Manual Swipe Reader

KT-1000/2000/3000 Series

KT-1000 / 2000 / 3000 & MKT-3000 is an intelligent, programmable Magnetic Stripe Reader. This reader provides a various range of functionality and value in a convenient package size. It reads up to three tracks of information with a single swipe and has a buzzer and two-color LED indicator to signal a successful read. This reader is programmable so that the data format and intelligent interface output can be programmed & configured to match application and communication requirements among Keyboard wedge, RS-232C and USB.

Features

- ISO-1,2,3 Full Track Read (LoCo / HiCo)
- A buzzer and two-color LED indicator
- Keyboard wedge / RS-232C / USB interface are available
- No external power supply required
- 12Mbps high speed communication
- Dimension: 38x135x46( mm) KT series / 30x90x29(mm) MKT series

KTDU-2200

This is a Manual Swipe type of Magnetic Card Reader with USB Keyboard [USB-HID] interface, and no need to install driver (PC auto detects this device). This can read up to 3 tracks of information, bi-directionally and enhances the usability and adds the flexibility.

Features

- Mag. Stripe card read
- Dual headed and bi-directional swipe type
- USB interface & USB Powered (5V)
- LED indicator
- Reads ISO-I&II&III tracks, bi-directionally
- USB HID interface [no need to install driver]
- Dimension: 99x33x33 [mm]

Model Name Configuration

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Blank: Standard size</td>
<td>M: Mini size</td>
<td>1: Keyboard Wedge</td>
<td>2: RS232C</td>
<td>3: USB</td>
<td>O: Din type</td>
<td>1: Mini Din type [only for KT-1000 series]</td>
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Knowledge Digital E-commerce

Manual Swipe Reader/Writer

KDR-2000
KDR-2000 is a Magnetic Stripe Reader/Writer for OEM applications. It reads/writes on a single track in ISO standard recording densities of 210bpi (ISO 1&3 track) and 75bpi (2 track). Also, it reads/writes both LoCo and HiCo cards. This reader/writer provides stability, reliability and accuracy required for ISO standards in the card reading/writing process.

Features
- ISO-1,2,3 Full Track Read-after-Write (LoCo / HiCo)
- JIS Standard is applicable
- 3-Dimensional Head Mounting Design achieves optimal Adhesion with Minimal Wear
- Universal Head Mounting makes Switching between Tracks Quick and Easy
- Low Power Consumption results in optimum Circuit and System Designs
- Industrial Long Lifetime Heads upto maximum 1 million passes can be provided at option
- Customized Mechanical Designs for Housing and Special Signal Interface are available

ZT-2000
ZT-2000 reads/writes data, and then verifies the encoding for up to three tracks in a single card swipe. ZT-2000 reads/writes both HiCo and LoCo cards. A customized software interface is applicable and it makes the read/write process quick, easy, and verifiable. The operation and design are unique. This reader/writer provides stability, reliability, and accuracy required for ISO standards in the card reading/writing process. ZT-2000 has a buzzer and five LED indicators to signal a successful read.

Features
- ISO-1,2,3 Full Track Read-after-Write (LoCo / HiCo)
- A buzzer and five LED indicators
- Die cast housing for stability & operating life
- Writes any track combinations of 210 and/or 75 bpi data density
- Operating life exceeds 1,000,000 card swipes
- Dimension: 60x200x55.5 (mm)
Manual Insertion Reader

KDR-3000 Series

KDR-3000 reads Single or Dual track magnetic stripe with ISO standards. This reader is intended to be mounted onto the front panel of the user’s terminal or other equipment, and find a host of applications where space is limited. This reader is especially useful in gaming applications. This reader functions reliably over a various range of operating speed, and operation is extremely simple. The card is simply inserted into the reader (in the proper orientation), pushed until it bottoms, and then withdrawn. This reader is available in TTL, RS-232C and USB interfaces.

Features

- ISO-1,2,3 Single or Dual Track Read
- Power supply: DC 5V ±5%
- Low power consumption: Max. 8mA
- TTL, RS-232C and USB interface
- GDS Protocol is available (KDU-3907 only)
- Proven and tested to last a minimum of one million cycles
- Card present switch

Model Name Configuration

|----|--------|------------|--------|---------------------------------|----------------------------------|--------------|-------------|-------------|-------------|----------------|----------------|-----------|

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CIM-4000

CIM-4000 is a motorized insertion type of magnetic stripe card Reader/Writer with RS-232C interface that is to read/write data on three track of magnetic stripe card in accordance with ISO 7810,7811, and to read/write data on IC card (T=0 / T=1 Protocol) in accordance with ISO 7816 and able to support Binary Code read/write. It consists of a magnetic card & IC card reader/writer and a Card Dispenser. CIM-4000 is used for various kinds of card issuing, and especially applied to parking system and kiosks.

Features
- Designed against overlapped cards dispensing
- Card low detection signal
- Card empty detection
- Extension hopper: 300 & 500 pcs
- RF module can be equipped at option
- TTL and RS-232C interface
- Various options are available
  (e.g. error card capture, remaining card indication)

KCD-1000

KCD-1000 is a card dispenser which is in a various range of types and options flexibly applicable to various systems such as kiosks. This dispenser can be combined with our card reader/writers to make customers’ application more useful. It is designed for robust structure to meet industrial standards and operated by TTL and RS-232C interface.

Features
- Designed against overlapped cards dispensing
- Card low detection signal
- Card empty detection
- Extension hopper: 300 & 500 pcs
- RF module can be equipped at option
- TTL and RS-232C interface
- Various options are available
  (e.g. error card capture, remaining card indication)
MTI-1000/2000 Series

MTI-1000 & 2000 is a specially designed ticket issuer for parking system & kiosks which reflects a various requirement from customers into one unit systematically with multi-functional options. This ticket issuer can be used with a various thickness of cards (0.18~0.76mm). It can read/write both Lo-Co & Hi-Co cards and the binary mode is available. Also, the terminal type (MTI-2000) is available with an internal power supply.

Features

- Automatic ticket feeding and cutting
- Magnetic stripe card read/write all three track
- IC card read/write
- Inkjet printing
- Error card capturing
- Used with a various thickness of cards (0.18~0.76mm)
- Ticket issuing speed: less than 2 sec/ticket
- Various options are available [Binary mode, Hi-Co, Shutter]
- Dimension: 210x417x188(mm)

Application

- Kiosk (information & payment)
- Parking lot system
- Highway tollgate system

Model Name Configuration

|------|--------------------------------|----------------------------|------------|-------------------------------|----------------------------|-------------------------------|--------------------------------|---------------------------------|---------------------------------|
SRT-125
SRT-125 series are compact sized of manual proximity type radio frequency card reading / writing module, which supports EM, TEMIC, HID & INDALA cards based on 125KHz securing access.

Features
■ Single power supply
■ T=CL protocol
■ Including WDT
■ Compact & user friendly design
■ Low cost with reliable quality
■ Possible customize for OEM

Support ASK/FSK/PSK
Internal ANT
Various Interface
WDT included
Compact & user friendly design
Low cost with reliable quality
Possible customize for OEM

SRT-1356
SRT-1356 series are compact sized manual proximity card reading/writing modules which support Mifare, ISO-14443 Type A, B & ISO-15693 cards under 13.56MHz secure transaction.

Features
■ Single power supply
■ T=CL protocol
■ Including WDT
■ Compact & user friendly design
■ Low cost with reliable quality
■ Possible customize for OEM
■ Possible Anti-collision

KEP-1356
KEP-1356 is advanced reader writer that can reads multiple tags such as Mifare Classic 1K, Mini & Ultralight, Tag-it, I-code under 13.56MHz from a distance of up to 60 mm [the distance is vary as per tags] under ideal conditions. This unit provides for easy installation and is a suitable hardware solution that can be integrated into POS, Vending machine, etc. where multiple tags readers for long lines are required.

Features
■ Built in Antenna
■ Compatible with various tags
■ 4 mounting holes
■ Compact & user friendly design
■ Low cost with reliable quality
■ Available customize / modification
■ Dimension: 80x80x10(mm)
RF Reader/Writer

KRF-2000
KRF-2000 is powerful, highly qualified & sophisticated access control system dedicated to all application requiring high level of security providing highly secure access for mainly door access control, time & attendance and parking system. It supports EM, TEMIC, and other 125KHz customized proximity card, Mifare standard card and ISO-14443 Type-A&B card and ISO-15693 tag as well with reliable performance enabling user to exchange their certified identities confidentially in a digital environment and is an affordable solution to secure perfect access control system.

Features
- Support ASK/FSK/PSK
- Internal ANT
- Various Interface
- WDT included
- Compact & user friendly design
- Low cost with reliable quality
- Possible customize for OEM

SRT-1200
SRT-1200 series are designed for PC logon and user authenticate application proximity card reading. They are compatible with EM, TEMIC and other 125KHz proximity cards such as HID, INDALA, etc. providing ideal solution for authentication such as PC logon, e-banking, e-commerce.

Features
- Various modules
- Various Interfaces
- 2 LEDs
- Including WDT (auto reset circuit)
- Compact & user friendly design
- Low cost with reliable quality
- Possible customize for OEM
KHT-1400
Head Ass’y Type module is composed of Mag. Head Ass’y and circuit board on to the head.

Features
- Card Standard: ISO-7810, 7811
- ISO-1,2,3 Full Track Read (LoCo / HiCo)
- Operation Voltage: DC 3.3V ± 5%
- Ripple: Less than 50 mVp-p
- Current: Less than 5.0 mA
- Feeding Speed: 15 ~ 95 cm/sec
- F-PCB mesh type

KDM-1900
The magnetic stripe card reader module, KDM-1903 reads up to three tracks (LoCo / HiCo) of information with a single swipe. Magnetic stripe data is output to UART TTL.

Features
- Card Standard: ISO-7810, 7811
- ISO-1,2,3 Full Track Read (LoCo / HiCo)
- UART TTL Level Serial Interface
- Operation Voltage: DC 3.3V ± 5%
- Ripple: Less than 50 mVp-p
- Current: Less than 5.0 mA
- Feeding Speed: 15~95 cm/sec
- Compliance with PCI
- PCB/F-PCB mesh type