Make Things Simple

Smart Fingerprint Patrol

E-Focus Industrial
Leading Manufacturer on Biometrics & Smart Card
& Patrol Devices/Solutions

Introduction of E-Focus

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or email us at info@securitcn.com
We, E-FOCUS, are Efficient, Creative, Organized, Reliable and Excellent for your choice.

Since 1999, E-Focus are leader in the development of fingerprint applications, comprising R&D, design and manufacture. We have been offering core fingerprint algorithm technology and mature embedded application products. We have our own in-house facility for research, development, design, production and sales. Implementing mature control systems on creativity and innovation, R&D Members, with 10+ years experience in this field, sustain our core competencies and key success factors to occupy the high top of biometric/smart card application field, fingerprint/card products are featured by the integration of their excellent system design and the precision in algorithms. We offer our global clients with fingerprint products of competitive price, superior quality and good performance.

We are the leading supplier, producer and manufacturer of Biometric fingerprint/smart card products. We achieve this because we have the fastest matching algorithm, the largest number of features, easy to customize, reliable and all at the lowest cost.

And we are the choice for OEMs, ODMs, distributors, integrators and dealers. We will happily work with you.

History:

1999: Concentrated on time tracking and access control security, making time attendance terminals, access control terminals with smart card and biometrics technology.

2000: Implemented Top-technology oriented strategy, with continuous high speed of developing and expanding, obtained leading role in biometrics appliances.

2002: Spread core technology to Security and Information Technology field, started to make Door Lock, Payment System etc. obtained good shares of market.

2004: Started to utilize telecom tech, launched door phone, cell phone jammer, GPS jammer etc into market, and offered OEM/ODM products in a big scale for international market.

2005: Implemented Global developing oriented strategy, Aimed at obtaining satisfaction from Global Customers and distributors.

2007: With great success in Global Market, our products have been distributed to 38 countries and regions including America, Europe, Australia, Japan …etc.

2008: With efforts of R&D, we are become a leading biometrics/smart card solution for many other industrial applications under our reliable, excellent, creative and costless solutions, launching biometrics POS, Mobile type Biometrics units etc including other new technologies.
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1. System constitution

The patrol managing system consists of managing computer, patrol apparatus, patrol spot, lithium cell, data cable, software, leather sheath and printer.

2. Product function & characteristics

2.1 Patrol device

Working principle:
Patrol device adopts war industrial chip and multiterm particular technical, the combination of these technical makes the application on the common function and application of the patrol apparatus extended. The device can be used for various special collection and appointed specialist patrolling, also data collection compelled to person. It is widely used in electricity meter, water meter reading, petrochemical industry, railway, animal management, mobile attendance and industrial settings parameter records, etc.

Function & characteristics

Fingerprint technical:
Adopt fingerprint technical, completely forbidden reading cards by asking other to help;

Construction Mode:
Adopt engineering plastic shell, water-proof, quake-proof, High and low temperature resistance, without damage once falling off;

Reading card mode:
Support for TI-Tagit, ISO15693, ISO14443A/B/C Standards, etc.

Support Languages:
Supports Simplified Chinese, Traditional Chinese, English and other languages;

Color shown:
TFT2.4-inch high-definition true color display (240 * 320);

Operation Interface:
VISTA user interface, simple and beautiful;

Smart navigation:
With route navigation, undetected spots and repeat reading cards prompts;

Project Management:
Can define the parameters for each patrol spot, to facilitate data collection;

**Smart Tip:**
- Humanity project parameter input prompt. (Maximum, minimum, the default value);

**Data Accuracy:**
- Data records with high accuracy;

**Unit Definition:**
- Support 250 units of measurement;

**Battery indicator:**
- Battery capacity multi-level display;

**Data View:**
- View fingerprints, data and project information directly;

**Early warning function:**
- Storage, capacity early warning function;

**Rights Management:**
- Multi-level fingerprint Rights Management;

**Keyboard Input:**
- Full-function keyboard input;

**Large capacity:**
- Store up to 10000 records;

**Security:**
- Data can be stored for 30 years after power-off;

**Means of communication:**
- USB 2.0 data download, without communication blocks;

### Technical Parameters:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading card mode</td>
<td>EM/TI</td>
</tr>
<tr>
<td>Storage records</td>
<td>10000</td>
</tr>
<tr>
<td>Fingerprint Records</td>
<td>300</td>
</tr>
<tr>
<td>Single-point items number</td>
<td>15</td>
</tr>
<tr>
<td>Maximum input data value bit</td>
<td>Before radix point: 9 bits, after :4 bits</td>
</tr>
<tr>
<td>Logical Selection Items</td>
<td>5</td>
</tr>
<tr>
<td>Measure Unit Number</td>
<td>250</td>
</tr>
<tr>
<td>Reader reaction time</td>
<td>&lt;0.1S</td>
</tr>
<tr>
<td>Display mode</td>
<td>TFT2.4-inch, high-definition true color display (240*320)</td>
</tr>
<tr>
<td>Communication baud</td>
<td>115200BPS</td>
</tr>
<tr>
<td>Communication mode</td>
<td>USB</td>
</tr>
<tr>
<td>Temperature</td>
<td>-40℃-----+70℃</td>
</tr>
<tr>
<td>Size</td>
<td>160<em>68</em>44MM</td>
</tr>
</tbody>
</table>

### 2.2 Noctilucence patrol spots

- Used to mark patrol spots
- With water-proof, anti-magnet and quake-proof functions, it can...
be installed anywhere without influences from environment.

- Induction-motor card is a passive reserving instruments which is built-in patrol spots;
- Dispense with power and easy to install;

2.3 Staff card

**Contactless TI-ID card**

- Can be used reliably in rainy, snowy, frozen and dusty days etc. It's a made-to-order high sensitivity card, to make sure the reading card distance and reduce the power consumption of the patrol apparatus
- Staff card with a minimum 20 years useful life

2.4 Communicate cable

Particular cable is used to communication between patrol apparatus and computer, which is smart in volume, high credibility, to spare users’ trouble on connecting external power, and do not need expensive communicate fixture, all deduct the cost of user system.

- Wiring system communication to use neither external power nor the patrol apparatus’ power;
- Plastic is made with high credibility and top grade figure;
- With a high transporting speed of 115200.

2.5 Charger for patrol apparatus

Made-to-order full automatic charger, a microcomputer controlling CMOS chip inside to inspect automatically, which has functions on cell’s constant-current power charge and discharge, which is good for cell’s useful life.

- Input voltage: AC 180-240/50-60Hz
- Input current: 30mA
- Output current: 250mA
- Output voltage: 4.2 V
- Fit capacity range: 240-2000mAH
- Using environment: Temperature ranged at -5~ 40;
  Humidity ranged at ≤90%

2.6 Lithium cell of the patrol apparatus

It adopts a high volume lithium cell core, which supplies a steady
3. Operation instruction

3.1 Patrol spot installation

1) First to find a install place(shall be away from the floor more 1.5m), then drill 2 holes with a churn drill and insert the glue plug.
2) Open the close over and fix the board with screws.
3) Fix the close over again be well.
4) Or paste it on the wall with a double-face glue( which will causes falling off for not strong enough).

3.2 Fingerprint patrol apparatus use instruction

Menu interface operation

a). Put the cell group inside the machine in right way;
b). Press the power on key for two seconds, start the patrol machine, then it shows constant time, cell power quantity, people’s name and routine name, menu and the company logo blinking, then it means that the patrolling person can work normally. The interface is as following:

c). At the main interface, press “Menu” key to enter the main menu. The menu consists of Router Navigation, Record Browse, Change inspector, Fingerprint manage;
Router Navigation:
Download the router navigation set on the computer to patrol apparatus, enter the navigation interface. The patrol spots will be displayed in the patrolling sequence to guide the patrol people to patrol as the range given.

Record Browse:
Query inspection records, record contains: inspector, inspection time and inspection spots, the project parameters information, etc.

Change inspector:
After fingerprint registration, inspector can be changed by fingerprint. The current
inspector information will be displayed on the main interface after successful changing:

**Fingerprint manage:**
It can realize functions of fingerprint registration, deletion, query, etc.

**Register manager:**
The manager No is from 0 to 9, total fingerprints is 10 pieces. (If manager fingerprint has registered, manager has to read fingerprint before entering the Fingerprint Manage;

**Register inspector:**
Inspector’ fingerprint No is from 10 to 299, the total number of inspector’ s
fingerprints is 290 pieces.

Delete Fingerprint:
Delete corresponding finerprint information by fingerprint No.

Fingerprint Query:
Inspectors query their corresponding registration No. by their fingerprints.

3.1 Reading Card
In the main interface, when the inspector reads the patrol spots, if the patrol spots setting is that it is necessary to check the current inspector’s identification by reading fingerprints. There are three cases:
1. The inspector is the operator of the device, at this time the inspector or operator can enter the project management interface directly. Third, the operator is not a currently assigned operator,
nor is it registered in the other operators, at this time can only unknown personnel operations, inspection records the operator will be with the current operator (not referring staff) record, in the PC cosmetologists will be displayed on a computer report. Back operation of the user interface. Figure:

2. Inspector A is not the current appointed inspector B, but the user registered on the device. When A reads his fingerprint, there will be prompt: “You are: A, Current inspector is B”. Then inspectors still can change the fingerprint to confirm the current assigned inspector. If A as the current inspector operates this item, the patrol records will be A's patrol records, and the PC reports will show “unauthorized”.

3. The inspector is neither currently assigned inspector, nor other inspectors registered on other items. At this time, the inspector can only operate as the unknown person. The inspector on the patrol records will be the current inspector (unknown person), and and the PC reports will show “unauthorized”. When user exits the interface, there will be the following prompt:

*Project operation*

Once inspector identified successfully enters the item patrolling, each patrol spot can be set fifteen different groups of patrol item, item concludes numeral type and option type.
**Numeric:** When inputting related values with keyboard of the device, you can use the keyboard, including data input, the system will prompt the reference value: max, default values, minimum value, units and data range tips. The maximum data range:

-999999999.9999---999999999.9999

**Option:** When entering option selection, each option can be set five different sub-items.

**Item inputting prompt:** The inputted item is displayed with blue color, the unoperated item is displayed with red color.

**Item inputting finished prompt:** When item is inputted finished, system will prompt you confirm the items inputted and save the information after confirmation.
**Patrol navigation:** After inputting items completed, device will navigate the current patrol spot, the former spot, and the next four patrol spots name. Press “Exit” to exit system or exit after five seconds automatically.

![Check Items](image)

**Patrol navigation prompt:** (this prompt is displayed after fingerprint verification)

**Normal patrol:** When patrolling normally as the sequence of the patrol routers, the system will prompt the corresponding router name, item lists.

![Check Items](image)

**Unknown spot:** The spots has not been registered on the patrol routers, the prompt is unknown spot. At the same time, the unknown spot will be saved as records.

![Unknown Spot](image)

**Repeat patrol:** When read patrol spots repeatedly, the patrol device will prompt you patrol repeatedly. The records will also be saved.

![Patrol System](image)
Missing patrol prompt: Once you do not patrol as the patrol routers setting, the patrol device will automatically prompt you missed patrol. The records will also be saved.

Patrol router navigation finished prompt: Device will prompt you finished patrol when patroling the last spot.

Device function prompt

Low Voltage: The cell sign on the main interface will be green when power is full, while low voltage, the sign is red, and then there will be prompt when device powers on. Battery Low: Suggest customers charge cell immediately once low voltage.
**Prewarning:** When not enough record capacity for patrolling two times, the device will prompt once power on the device: Memory Low!

**Data full:** When data is full, the patrol device cannot read data any more. You can use it normally once data is downloaded.

**Communication prompt:** When communication between device and computer, the patrol device will prompt connecting. At this time, you must keep the device powering on, or the data transfer will be interrupted, and makes error. Operate the devcie after the prompt interface is not closed.
Auto power-off: Device will power off automatically when no operation within fifteen seconds on the main interface.

Auto standby: Device will standby after one minute at any interface, except main interface. System will return to the standby interface when restarting the device.

Manually power off: On the main interface, press power key for two seconds, the device will be powered off automatically.

4. Matters need attention & system maintenance

1). The use of computer shall abide by the common operative demands, can not close or restart at random, only can close or restart it after exit the patrol management system normally, or else may destroy data;
2). Once the low voltage prompt arise, please charge the cell immediately, or may cause the missing or error of the data;
3). Must numerate card among the domain of validity of the apparatus, get back the apparatus once the warning tone is heard;
4). The said system shall be managed and operated by appropriated personnel, the operator shall have certain experience about computer operation;
5). Non-professional mustn't tear down any components of the system, nor modify and delete any document or folder;
6). Must notify the manufacturer or the appointed after-service department for any breakdown of the system, never deal with by oneself voluntarily lest any unnecessary lose.

5. Solutions on frequent malfunctions

1). Not working of the Apparatus
   Firstly to check whether the cell pole is bad contact or not, maybe the cell is out of
power, charge it soon. If neglect this low voltage and still use, it will discharge completely and the apparatus stop working;

When complete discharging, it need more time to charge than other. After above steps, it is still in breakdown or charge unavailable, please contact with the supplier.

NOTE: The data inside the patrol machine will not lose after complete discharge;

For strong strike on the cell, which may be ruined and cannot work normally.

2). Communication unavailable

Make sure the transporting cable work normally and it was connected with the computer and data apparatus.

If the computer is on line or communicate ports among PCs, there may be a port conflict. Then select other port at [Ports] through [Data download].

In use, there are prompt function for may happened abnormal incidents:

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>CAUSE</th>
<th>DISPLAY</th>
<th>MEASURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery Low</td>
<td>Low voltage of cell</td>
<td>Charge soon</td>
<td>Use it after full charge</td>
</tr>
<tr>
<td>Data Full</td>
<td>Much more Induction-motor times</td>
<td>Please download for full data</td>
<td>Use it after download and clear the data in device</td>
</tr>
<tr>
<td>Can not connect to Computer</td>
<td>Bug operation</td>
<td>1. Install the USB Comm port driver</td>
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<tr>
<td></td>
<td></td>
<td>2. Check the index of simulation comm port</td>
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<td></td>
<td></td>
<td>3. Keep device power-on</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Check the device is connected to computer by USB cable</td>
<td></td>
</tr>
<tr>
<td>Can not Power ON</td>
<td>Bad contact of the leaf of the cell</td>
<td>Wash clear the touch-chip both the cell and main machine</td>
<td></td>
</tr>
<tr>
<td>Can not Launch Fingerprint Component</td>
<td>Too low voltage of the battery</td>
<td>No display</td>
<td>Charge the battery and use again</td>
</tr>
</tbody>
</table>
6. Packing transporting and reserving

1). The said system pack individual components according to their different configurations;
2). To transport said system shall under its original package, do not unfold package to transport, and pay more attention on rain and snow defending and mechanic destroy;
3). Packed product shall be kept in –20~70℃ and relevant humidity shall be ≤80%, no corrosive gases exist, and be in well ventilated room or warehouse.

7. Customer service & promise on technique support

For normal use while any quality problem arise, user can change the same type product among 3 months expiry day from the purchase date; have right to be maintained in 1 year for free; beyond 1 year of lifetime maintenance, there be a material fee for components change. But any acts occurred as follow, the said promise terminate thereby:
1). User who refit or dispose by himself and other operations cannot secure the integrity of both hardware and software of the product;
2). User who ruined part or the whole product for wrong operation as not abide by the instructions.

◆ Safety Cautions

The said product is an equipment with full technicality, once breakdown happened in using process, please notify our after-service department or branch companies and agent on site to deal with the problem, avoid by all means to unfold at random, lest to ruin internal organization to damage your right and benefit.

Please refer to the instrument to use the said equipment’s electrical characteristic, lest to damage it or user’s equipment.
8. Guarantee card including guarantee items

Product Maintenance Guarantee Card

Customer shall please fill in below content and keep it carefully after purchasing the machine, in order to gain perfect after-service. Please read carefully the items given:

Customer’s Name: ________________ Customer’s Telephone Number: ________________

Product type: ________________ Machine serial Number: ________________

Purchase date: ________________ Distributor: ________________

Invoice Number: ________________ Distributor stamp: ________________

Product Maintenance Guarantee Items

1) For normal use while any quality problem arise, user can change the same type product among 3 months expiry day from the purchase date; have right to be maintained in 1 year for free; beyond 1 year of lifetime maintenance, there be a material fee for components change.

2) The purchasing date shall refer to the date which is in the invoice or receipt note made by the distributor;

3) Claim to change a new product will be fail where there are any man-made package damage, while a maintenance service be available;

4) But any acts occurred as follow, the said promise terminate thereby:
   (1) User who refit or dispose by himself and other operations cannot secure the integrity of both hardware and software of the product;
   (2) User who ruined part or the whole product for wrong operation as not abide by the instructions.

5). Our product will be changed or maintained only depend on this Guarantee Card, and purchasing invoice or receipt is necessary;

6). Anywhere you bought our product, which can gain same service from nearby after-service center. If the problem is not solved well, please call or mail to our customer service department, sure we will solve it as soon as possible;

7). Right to modify and interpret about above items is attributed to said company.

<table>
<thead>
<tr>
<th>Date</th>
<th>Maintenance records</th>
<th>Handle person</th>
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<tr>
<td></td>
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