

# Panasonic

Iris Recognition  
Access Control System  
**BM-ET500 Series**



Fast capture and identification

# Smoother, Smarter, More Secure Access and Entry Management

With automatic iris capturing, identification is as simple as looking at the camera. High speed and precision make this system the world's most advanced access and entry point security identification system.



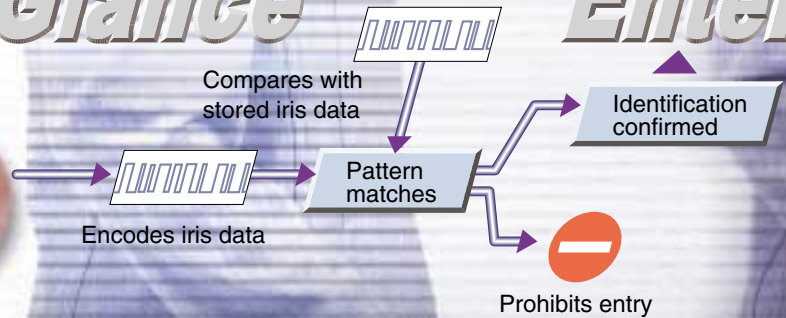
*Approach*

*Glance*

*Enter*



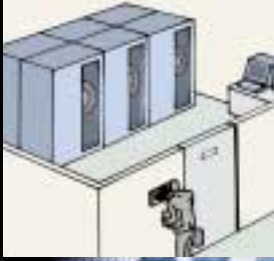
Captures image of irises



# Ideal in All These Applications

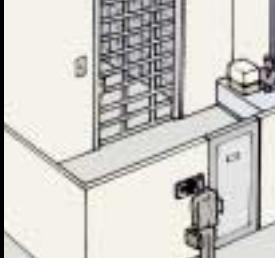
## Offices

Data Centre, Material storage, safes, executive offices, secure meeting rooms



## Laboratories and factories

Drug or dangerous materials storage rooms, night or holiday entry control



## Financial institutions

Safes, safety deposit box rooms



## Lifeline facilities

Power generator rooms, dam management offices, gas company control rooms



## Traffic control centres

Expressway administration centres, railroad dispatcher rooms



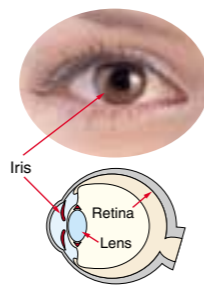
\*Police, prisons, courts

\*Any and all security applications

## Airport and harbor facilities

Staff gates, Immigration, workshops

# "One Glance" Automatic Iris Recognition



**How Iris Recognition Technology Works**  
 The iris is a thin coloured membrane located around the pupil. Iris patterns are extremely complex and unique to each individual, and ideal for positive identification of a specific individual.

- Iris Characteristics**
- Complex patterns unique to each individual (even fraternal and identical twins have different iris patterns).
  - Iris patterns start to form six months after birth and are fixed from the age of one, after which they never change.
  - They are extremely difficult to imitate.
  - They are easy to capture and extract data from.

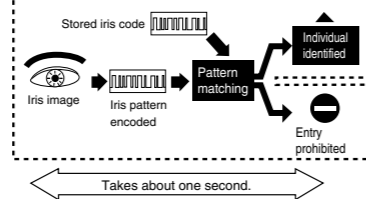
## "One Glance" identification

When an individual looks at the camera, the irises are automatically captured and matched against stored patterns. There is no need, as with previous systems, to hold the body in a certain way or the eyes in a certain fixed position. Pattern matching and identification take only a few seconds.\*

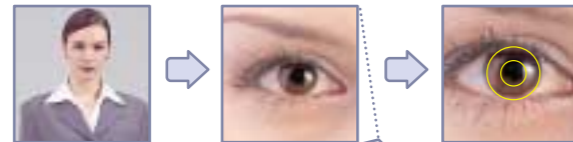
- 1 Camera starts automatically when approached.
- 2 Looks intently at panel.
- 3 Pattern matches, door unlocked.



\*Capturing the image takes about two seconds. Time required for iris recognition may vary depending on several system configuration factors.



## Automatic Iris Image Capturing Using Two Cameras



Wide angle camera recognizes face. Telephoto captures image of iris. Iris image is encoded, pattern matches, door is unlocked.

\*Eyeglasses, sunglasses, some types of contact lenses, or environmental conditions may prevent the capturing from working properly.

An built-in video camera for surveillance can also integrate existing security system.

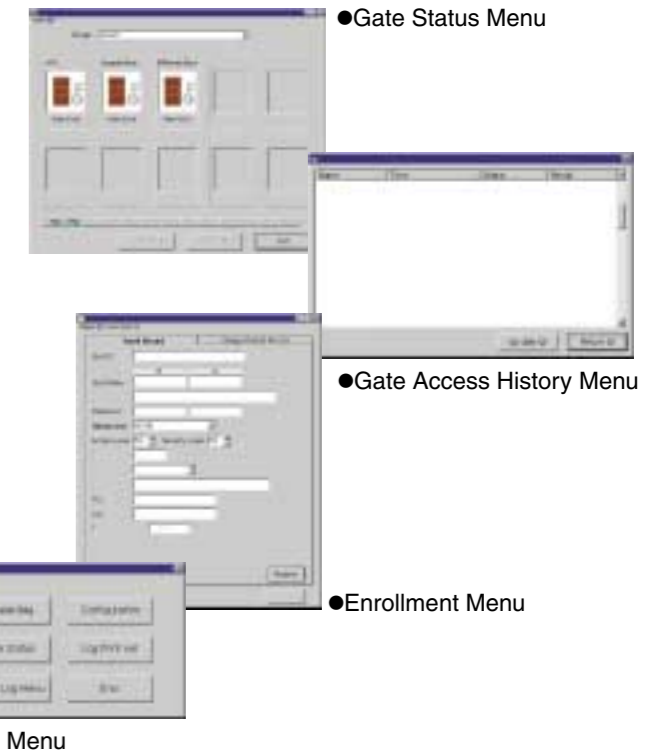
## No physical contact makes it perfectly safe.

Since users simply stand in front of the camera, there is no physical contact required. The amount of infrared illumination used is very weak, making the system perfectly safe.  
 (IEC60825-1 Safety of laser products - Part 1 : Equipment classification, requirements and user's guide)

## Access and entry status can be monitored in real time.

Realtime user access status, and access history log can be searched, displayed and printed on optional Control Data Software; BM-ES500.

### Sample Display

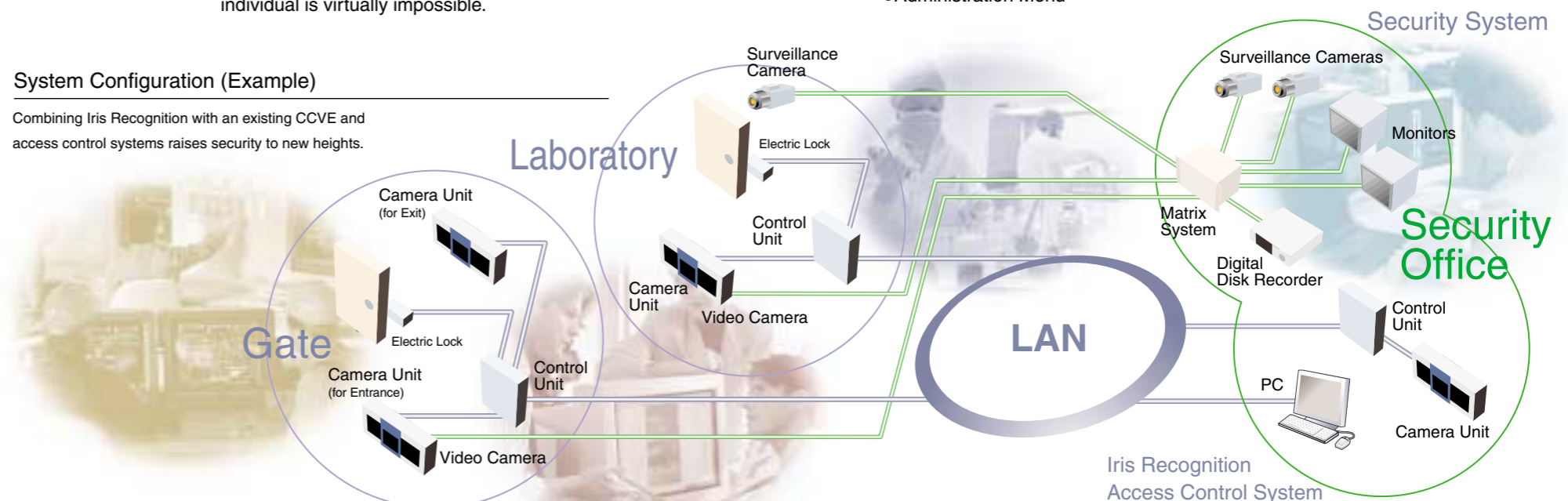


## Best error rate compared to any Biometric. Ideal for high-security applications

Use of iris recognition technology reduces errors to less than 1/1,200,000, ensuring highly precise individual identification. Confusion with another individual is virtually impossible.

## System Configuration (Example)

Combining Iris Recognition with an existing CCVE and access control systems raises security to new heights.



## Benefits from using Iris Recognition

### No need for ID cards or passwords.

Iris recognition eliminates the need for ID cards and problems caused by loss, damage or theft of ID cards. There is none of the inconvenience associated with forgotten passwords.

### Easily accommodates a growing number of users.

The number of possible users is limited only by the number of iris patterns stored. Iris scan is ideal for large facilities or when the number of users is expected to increase.

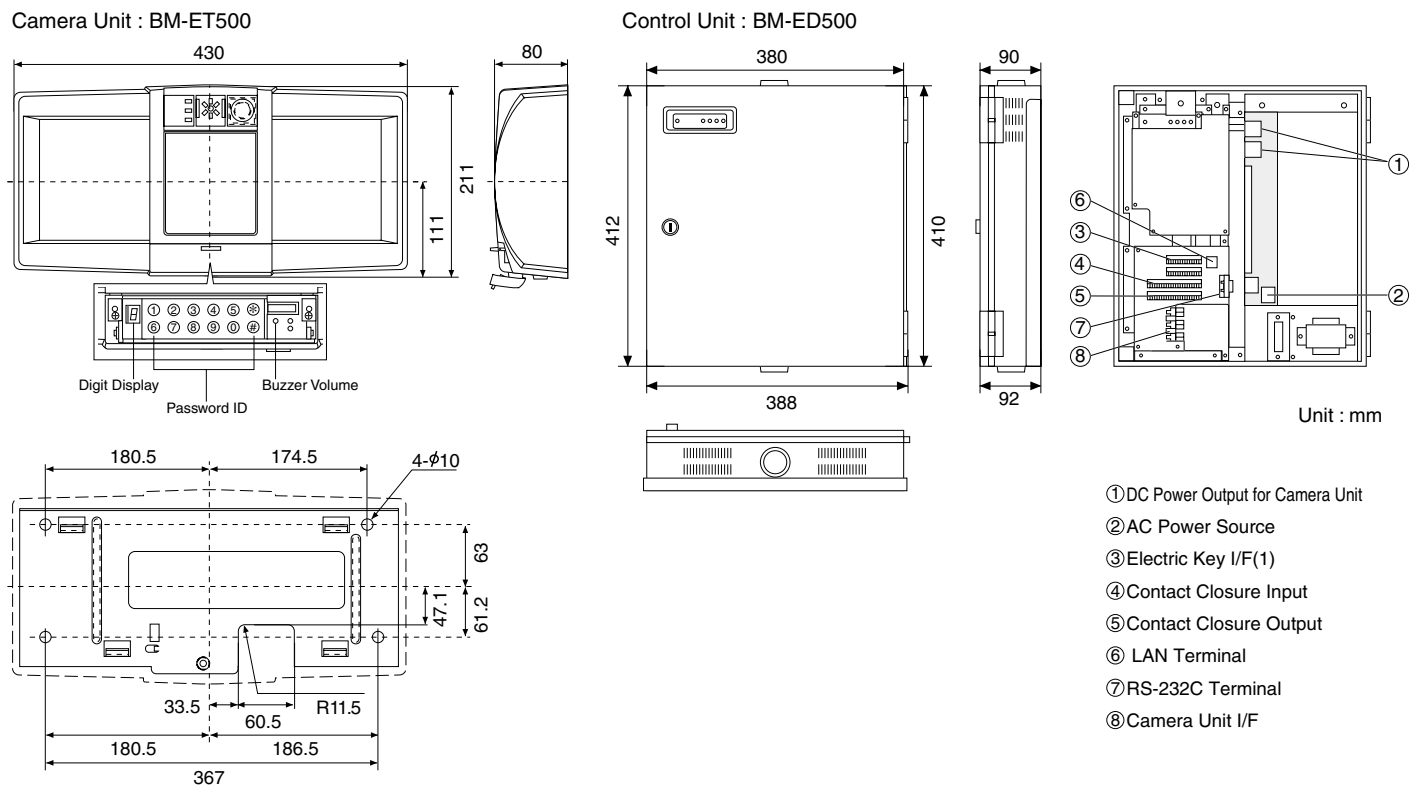
### Time and cost savings are large.

In contrast to previous systems, iris recognition eliminates the need to issue ID cards or passwords. One glance is all it takes to capture and store a user's iris pattern. No further effort or cost is required.

## SPECIFICATIONS

Camera Unit; BM-ET500		Control Unit; BM-ED500	
Recognition Time	approx. 3 seconds (capturing iris images plus checking the data)	<b>External Interface</b>	
Max. Registration Data	4000 irises (2000 persons)	Camera Input Interface	Camera unit input x 3, BNC connectors Video / Command / Reply (mixed serial signal) Power output DC32V x 2 (connect by power circuit board)
ID	Max. 17 digits	LAN Interface	10/100 Base-TX x 1, RJ45 connector
Password	Max. 10 digits	Serial Interface	RS-232C x 1 (D-sub, 9-pin connector) Baud rate = 9,600 - 38,400 bps (preset by DIP-SW on G-Box)
Distance From Control Unit	20m (Max. 100m)	Electric Key Interface	DC24V output x 2 ports Max. cable distance : 100m
Backup For Iris Recognition	Password access by 10 key input	Contact Closure Input	200ms - 2seconds, make / break (preset by data control PC) DC 5V, 3mA or higher
Installation	Surface & flush wall-mount / On the table with camera stand, Indoor application only	Contact Closure Output	200ms - 2seconds, make / break (preset by data control PC) DC 24V, less than 100mA
Installed Direction	vertical only	<b>General</b>	
Operating Distance	25cm - 60cm from Iris Camera	Power Source	100/120/220/240V AC, 50/60Hz
Power Source	DC32V from Control Unit (Max. 20m from Control unit) DC24V with power supply unit (Max. 100m from Control unit)	Power Consumption (approx.)	less than 190W
Ambient Operating Temperature	+0°C - +40°C	Ambient Operating Temperature	0°C - +40°C
Ambient Operating Humidity	20% - 80%	Ambient Operating Humidity	20% - 80%
Dimensions (W x H x D)	430 x 211 x 80 mm	Dimensions (W x H x D)	380 x 410 x 90 mm
Weight (approx.)	6 kg	Weight (approx.)	10 kg
<b>Control Data Software; BM-ES500</b>			

## DIMENSIONS



• This system is jointly developed with Oki Electric Industry Co., Ltd.

• All TV pictures are simulated. • Weights and dimensions are approximate. • Specifications are subject to change without notice. • These products may be subject to export control regulations.

DISTRIBUTED BY:

***"Forward Security Systems"***

***Lenina st.21-A,Lytkarino, Moscow area,140081,Russia***

***Tel.:+7(095)506-19-16; Fax.:+7(095)552-78-81***

***e-mail:info@biometricsecurity.ru; fs-system@mail.ru***

***http://www.biometricsecurity.ru***

**System Solutions Company**  
**Matshita Communication Industrial Co.,Ltd.**  
 4-3-1, Tsunashima Higashi, Kohoku-ku, Yokohama,  
 223-8639, Japan  
 Tel 81(0)45-531-1231  
 URL  
<http://www.mci.panasonic.co.jp/english/prdct/cctv/index.html>

**Panasonic**

Panasonic is the brandname of Matsushita Electric.  
 Printed in Japan BM-JKET500C (2N-693A)