Panasonic

ideas for life

Iris Reader
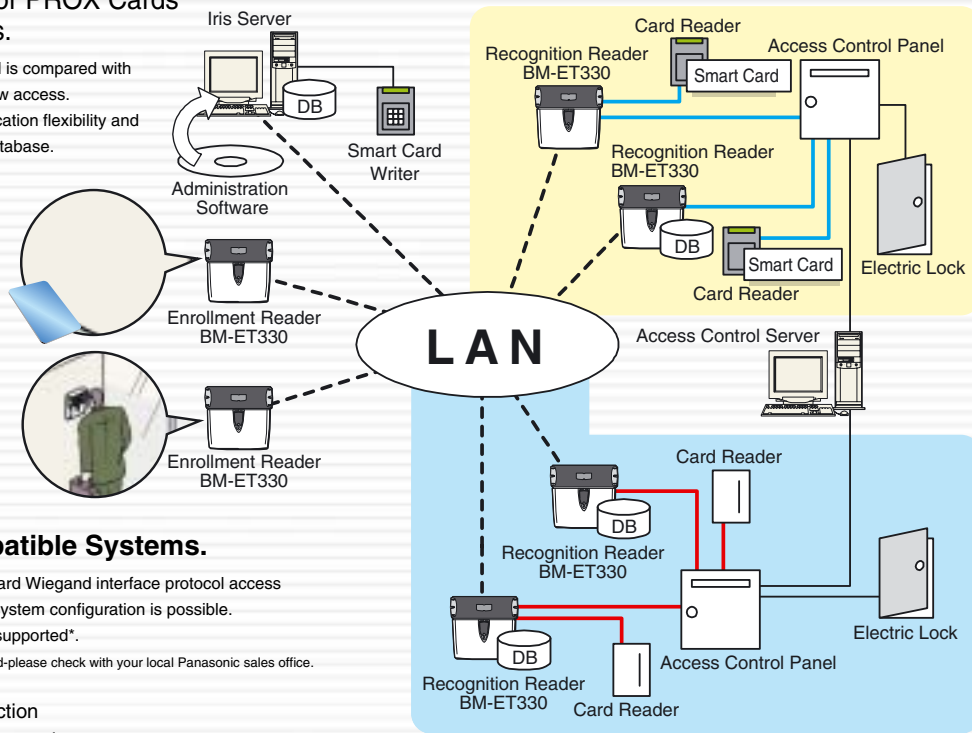BM-ET330

High Precision

Quick Recognition

Flexible Interface

Built in support for PROX Cards and Smart Cards.

The iris data on an ID card is compared with the captured image to allow access. Smart cards provide application flexibility and do not require a central database.

iCLASS by HID

Integrates with Wiegand-compatible Systems.

Compatible with the standard Wiegand interface protocol access control systems. Flexible system configuration is possible. Legacy PROX cards are supported*.

*Most card formats are supported-please check with your local Panasonic sales office.

- - - - LAN Connection
——— Wiegand Connection
——— RS-485 Connection

Iris Server
Card Reader
Recognition Reader BM-ET330
Access Control Panel
Smart Card
Administration Software
Smart Card Writer
Recognition Reader BM-ET330
Enrollment Reader BM-ET330
Smart Card
Electric Lock
Card Reader
Enrollment Reader BM-ET330
L A N
Access Control Server
Card Reader
Recognition Reader BM-ET330
Recognition Reader BM-ET330
Electric Lock
Access Control Panel
Card Reader

Integrates easily with PROX cards and other devices. Simple to setup and install.

Access Control systems are one of the most important infrastructures for a safe, secure society. Panasonic developed iris reader cameras applying iris biometric technologies as keys to secure access control. A variety of configurations are possible to meet your operational needs.

Faster 1.0 Second Recognition Speed

When both eyes are reflected in the mirror, the system automatically captures the iris images and completes recognition in 1second or less. The quick identification process prevents waiting in line.

High security, with false acceptance ratio as 1 in 1.2 million*

Iris recognition uses individual differences in the complex patterns found in the iris of the human eye to authenticate individual identities. Iris recognition is the most precise of all biometric identification systems. The false acceptance ratio is so low that the probability of falsely identifying one individual as another is virtually zero.

Retina
Lens
Iris
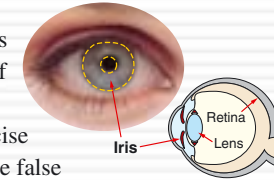
Iris Characteristics
- An extremely complex pattern that differs even between identical twins.
- Patterns stabilize between six months and two years of age and then remain unchanged for life.
- They are extremely difficult to imitate.

*"RECOGNIZING PERSONS BY THEIR IRIS PATTERNS" by Dr.John Daugman, University of Cambridge.

This tilt handle makes it easy to optimize camera angle when capturing iris images.

For iris recognition, two cameras simultaneously capture the images from both eyes.

Recognition results are displayed.

Integrated color video surveillance camera. Output may be connected to existing video surveillance system.

The Live Indicator displays current operating condition.

Panasonic BM-ET330
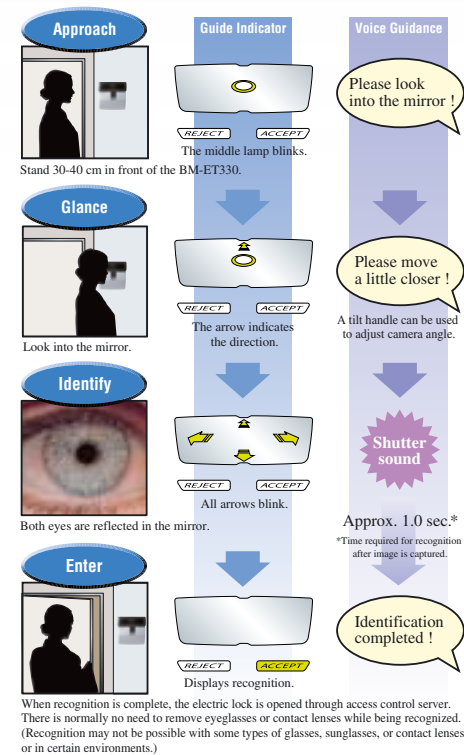
Voice guidance recognition procedure

Voice guidance via the speaker on the side provides operational guidance and recognition results. Fourteen (14) languages can be selected for each iris recognition camera.
Supported languages: English, French, German, Spanish, Italian, Turkish, Arabic, Chinese, Korean, Russian, Portuguese, Dutch, Swedish, and Japanese.
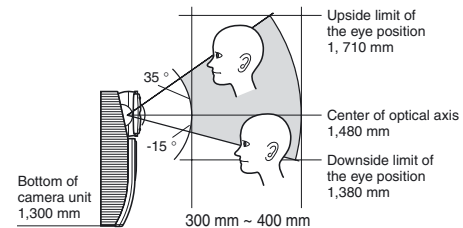
Three settings for voice guidance

Simple : Click of the shutter and recognition results are provided.
F u l l : Click of the shutter and recognition results are provided as well as guidance such as "Come closer" or "Move to the left."
M u t e : No voice guidance.

Tamper Detection

Audible alarm is triggered via the integrated tamper switches. Alarm signals are also transmitted to the access control system and Administration Server. The tamper protection feature prevents data from being extracted from the system.

Approach
Stand 30-40 cm in front of the BM-ET330.

Glance
Look into the mirror.

Identify
Both eyes are reflected in the mirror.

Enter
When recognition is complete, the electric lock is opened through access control server. There is normally no need to remove eyeglasses or contact lenses while being recognized. (Recognition may not be possible with some types of glasses, sunglasses, or contact lenses or in certain environments.)

Guide Indicator
REJECT ACCEPT
The middle lamp blinks.
The arrow indicates the direction.
All arrows blink.
Approx. 1.0 sec.*
*Time required for recognition after image is captured.
Displays recognition.

Voice Guidance
Please look into the mirror !
Please move a little closer !
A tilt handle can be used to adjust camera angle.
Shutter sound
Identification completed !

The camera unit swivels up and down

The angle of the two embedded cameras can be adjusted to Accommodate users from 150 cm to 183 cm. Taller users can simply bend over to use the system. For ADA requirement the unit can be mounted 86 cm from the floor to accommodate users in a wheelchair, etc

35°
-15°
Upside limit of the eye position 1, 710 mm
Center of optical axis 1,480 mm
Downside limit of the eye position 1,380 mm
Bottom of camera unit 1,300 mm
300 mm ~ 400 mm

25 User License Included

Iris data for up to 25 users can be registered with the Base Administration Software BM-ES330. With additional user licenses (optional), the system can register and manage iris data for up to 5,025 users. Call Panasonic for systems larger than 5,025 users.

For systems large and small

Main menu
Panasonic
Iris Image Display
Environment Setting Menu
User Information Menu

Iris Reader
BM-ET330

Flexible registration software supports incremental users. User License Software; BM-EU30000 Series comes in four key sizes: for 100 users, 1,000 users, 3,000 users, or max. 5,000 users. Contact Panasonic for systems that require more than 5,000 registrants. Easy operation and management from a iris server, All settings, registrations, updates, and information confirmation can be controlled from a PC display.

Access log can be searched by time

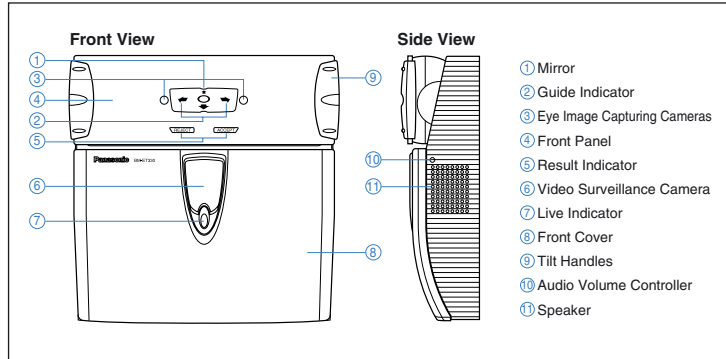Using the time of image capture stored in the camera, you can search the access log for the time specified.

RECOMMENDED SMART CARD READERS AND WRITERS

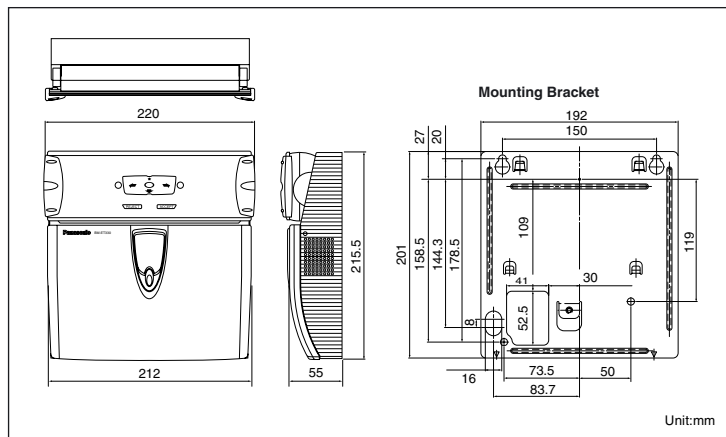| Applicable products	Manufacturer	Product / Product No.
IC Card Writer	HID Corporation Ltd. RFIDeas, Inc.	RWK400 RW400 RWKL550 RFID1356i (USB and RS-232)
IC Card	HID Corporation Ltd.	2001, 2011, 2021, 2031, 2041, 2051, 2061 This software supports the blank card only.

NOTE
• In regard to details of the Smart Card Writer and the Smart card, refer to the respective instruction manuals attached to merchandise.
• When a card writer is connected and a USB-RS-232C conversion connector is used, the system may not operate normally.
• The USB connections are applicable to Windows® XP only. Operation is impossible with Windows® 2000.

MAJOR OPERATING CONTROLS

Front View   **Side View**

① Mirror
② Guide Indicator
③ Eye Image Capturing Cameras
④ Front Panel
⑤ Result Indicator
⑥ Video Surveillance Camera
⑦ Live Indicator
⑧ Front Cover
⑨ Tilt Handles
⑩ Audio Volume Controller
⑪ Speaker

APPEARANCE

Mounting Bracket

Unit:mm

PRODUCT CONFIGURATION

Iris Reader **BM-ET330**	Administration Software **BM-ES330**

User License Software
BM-EU30100 (for 100 Users)
BM-EU31000 (for 1,000 Users)
BM-EU33000 (for 3,000 Users)
BM-EU35000 (for 5,000 Users)

BM-ET330 SPECIFICATIONS

General	
Power source *1:	12 V DC/24 V AC
Power consumption:	15 W
Ambient operating temperature:	0 ˚C to +40 ˚C
Ambient operating humidity:	30 % to 80 %
Dimensions:	212 mm (W) x 216 mm (H) x 55 mm (D)
Weight:	2.1 kg (this iris camera only) 2.4 kg (with the mounting bracket)
Interface:	Wiegand, RS-485
Network:	10 Base-T/100 Base-TX(Auto negotiation)*2
Network protocol:	TCP/IP
Available card reader :	RWK400(Manufactured by HID Corporation)

Input/Output	
Wiegand power (card reader):	5 V DC, 100 mA max.
Wiegand DATA0 (card reader):	0 V to 5 V DC, 24 mA max., Active low
Wiegand DATA1 (card reader):	0 V to 5 V DC, 24 mA max., Active low
Wiegand power (access control panel):	5 V DC (No connection available)
Wiegand DATA0 (access control panel):	0 V to 5 V DC, 24 mA max., Active low
Wiegand DATA1 (access control panel):	0 V to 5 V DC, 24 mA max., Active low
Wiegand ACCEPT-LED(access control panel):	0 V to 5 V, 24 mA (Max.), Active low, Pulse width: 200 ms or more
Wiegand REJECT-LED(access control panel):	0 V to 5 V, 24 mA (Max.), Active low, Pulse width: 200 ms or more
RS-485(A),(B)(card reader):	Differential input: ±0.2 V or more, Differential output: ±2 V or more (When termination is ON)
RS-485(A),(B)(access control panel):	Differential input: ±0.2 V or more, Differential output: ±2 V or more (When termination is ON)
Alarm input 1(recognition start/buzzer):	0 V to 5 V, 24 mA (Max.), Active low, Pulse width: 200 ms or more
Recognition result output1 (ACCEPT):	Open collector output, Normally Open, Active low, Pulse width: 0.1 s to 60 s, 24 V DC, 24 mA
Recognition result output2 (REJECT):	Open collector output, Normally Open, Active low, Pulse width: 0.1 s to 60 s, 24 V DC, 24 mA
Alarm output1 (power status):	Open collector output, Normally Close (Low level), 24 V DC, 24 mA
Alarm output2 (tamper detection):	Open collector output, Normally Open, Active low, 24 V DC, 24 mA
Video surveillance camera output:	1 V [p-p] PAL composite 75Ω BNC connector (Not investigated UL 294)

Function	
Iris recognition time:	Approx. 1.0 seconds (After iris image capturing until the recognition result is output) *3
Eye image capturing range:	Approx. 30 cm to 40 cm (0.98 ft. to 1.32 ft.) between the eyes and the mirror
Total number of users enrolled *3 BM-ET330:	1, 000 users max.
Iris server:	5, 025 users max.
Voice guidance:	14 languages supported (English, German, French, Spanish, Italian, Russian, Chinese, Korean, Portuguese, Turkish, Arabic, Dutch, Swedish and Japanese) Mute, Simple (Shutter sound and recognition result), and Full (voice guidance, shutter sound, and recognition result) selectable
Guide indicator:	Front, Back, Left, and Right
Live indicator:	Blinking, On, and Off selectable
Angular field view (video surveillance camera):	Horizontal: 115˚, Vertical: 85˚ (Fixed)
Security function:	Tamper detection switch Iris data encryption

*1 The third-party external power-supply should meet the following specifications.
　Output voltage:　　　　　　12 V DC, 24 V AC
　Output current capacity:　　1.5 A or more (DC/AC)
　Rated ripple voltage/Ripple noise:　150 mV [p-p] or less
　Overcurrent protection:　　　Enabled (mandatory)
*2 This iris reader supports auto negotiation. If you use a hub supporting auto sensing, connection may not be established due to auto sensing malfunction.
*3 The recognition time may differ depending on capturing conditions, network conditions, or the total number of enrolled users.
*4 User License Software BM-EU30000 Series (option) is required.

Important – Safety Precaution: carefully read the operating instructions and installation manual before using this product.
　　　　　　– Panasonic can not be responsible for network performance and/or other manufacturer products that reside on the network.
• All photographs and menu are simulated and shown for the purpose of explanation.
• Weights and dimensions are approximate. • Specifications are subject to change without notice. • This product is subject to export control regulations.

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