

EyeCash™

**The world's first
iris-enabled ATM**



No card to lose no PIN to forget

- Advanced head-tracking
- Automatic tilt adjustment
- Multi-Modal iris and face
- Built-in countermeasures
- Extremely fast, secure and accurate
- Cost effective



Specially designed for ATMs

EyeCash™ is the world's first iris-enabled camera system designed and built to work seamlessly with any ATM cash machine. The EyeCash™ is fitted with pristine optics, advanced electronic circuitry and slim body motors that can either be retrofitted onto an existing ATM or embedded within. The EyeCash™ deploys bespoke anti-glare filters that are specially designed to reduce effects of sunlight and reflection that can appear on the eye's surface during normal, outdoor ATM operation.

Fast image capture

Maintaining the high-quality image capture and identity verification required in real-time for ATM cash withdrawal is a challenge that EyeCash™ meets and exceeds with ease. The secure, faultless EyeCash™ platform provides identity authentication in under three seconds, providing the user with express cash withdrawals, and an experience that is both easier and faster than traditional chip and PIN.

Contactless, head-tracking technology

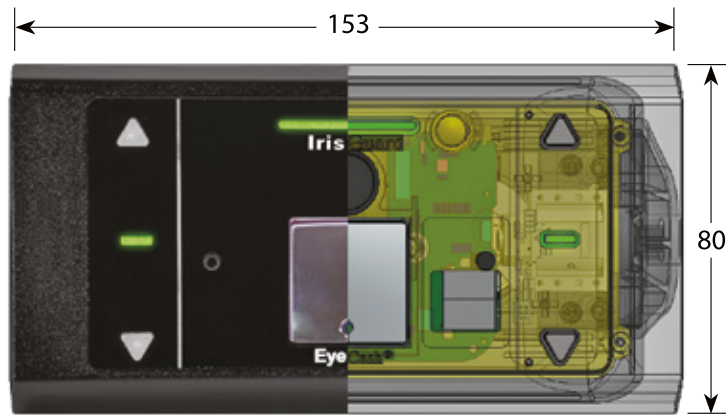
As the world leader in iris recognition technology, **irisguard** has designed the EyeCash™ with inbuilt, sophisticated head-tracking technology that tracks the user's face and adjusts the camera tilt automatically within a $\pm 20^\circ$ degree span. This innovation allows users of all heights to use the ATM comfortably without touching or adjusting the camera manually, therefore contactless and hygienic.

Contactless and automatic adjustment

Follows your **eye**



EyeCash™ Specifications



Iris Capture Specifications

Image Sensors	Mega Pixel monochrome sensor
Image Iris Resolution	640 x 480 (VGA)
Number of Bits	8 bit greyscale
Image Sensor Format	Progressive scan with ERS
Lens	Custom irisguard design
Lens Optical Resolution	20 lines/mm
Focus	Automatic – focus resolution 0.005mm
Frame Rate	> 40FPS
Imager Sensitivity (SNR)	> 40db
Image Resolution	> 10 lines/mm or > 5 line pairs/mm
Inter Pupillary Distance	49mm to 79mm
Illumination	700 – 900 nM direct and cross
Pupil Control	White Light Flash (Patented)
Countermeasures	Patented Samba Live Eye Detection (SLED)
	Contact lens detection
	Off-axis detection
	Abnormal dilation detection
	Glass neutralisation
Range Measurement	Optical & image processing
Capture Range	260mm to 350mm
Capture Time (Dual Eye)	< 2.0 seconds
Tilt Control	Touch buttons
	Automatic Face Alignment Process (AFAP)
	Tilt range: +/- 22 degrees
	on standard bracket
Standard Mount	Standard and extended bracket
Optional Mount	Desk mount
	Counter-top mount fixed and rotating
	ATM mount

Cryptographic Hardware Specifications

Cryptographic Algorithms	DES/3DES, AES 128/192/256bits, RSA up to 4096 bits, DSA up to 2048 bits, ECC up to 384 bits ISO/IEC 9798-2/FIPS196
Main Feature	FIPS 140-2 identity-based authentication unilateral authentication protocol
	Using password, secure channel protocol (SCP02/SCP03) OTP - FIPS 198 algorithm with SHA1 digest
File System	Embedded dynamic FAT12 File System
Secure Vault Size	8K Bytes
Audible Status Indicator	EAL4+ ready, FIPS 140-2 security level 3, SSL support, PKCS #11 Microsoft MS-CAPI NIST certified FIPS 140-1 and FIPS 140-2 cryptographic modules

Face Capture Specifications

Imager Sensor Size	1/6" sensor CMOS RGB
Imager Format	Progressive scan
Imager Resolution Portrait	VGA
White Balance	Automatic
Frame Rate	> 15FPS @ VGA quality
Lens F-Stop	F2.8
Lens FOV Horizontal	60 degrees
Imager Sensitivity (SNR)	> 49db
Image Horizontal Resolution @300mm	~2 pixels/mm
Horizontal Object Size @ 300mm	~230mm
Inter Pupillary Distance/Pixels @300mm	64mm/128 pixels
Face Capture Range	260mm to 350mm

General Specifications

Dimensions (Net)	153(L) x 80(H) x 42(D)
Weight (Net)	235 gms
Power and Data Interface	+5Vdc single USB
USB Standard	USB 2.0 (480Mbps) high speed
User Guidance	Convex mirror
Voice prompts	Dynamic multi-lingual
Status Indicator	Multi-coloured status bar
Operating Temperature	0° C - +60° C
Approvals	CE FC
Eye Safety	Lamp safety standard IEC 62471 – exempt level
ISO Standards	Iris Interchange Standard ISO 19794-6

EyeCash™



Certificate No. 7348

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