huperLab®

huper
3D Defender

**Real-time Detection
in Depth & Two-way
Audio/Speaker Support**

- Easy to Setup
- Water-proof 3D Stereo Camera
- Ideal for Outdoor Use
- Real-time Perceive and Analyze Intrusion
- High Environmental Tolerance with High Accuracy
- Powered by Intel® IPP and Intel® SSE Technology
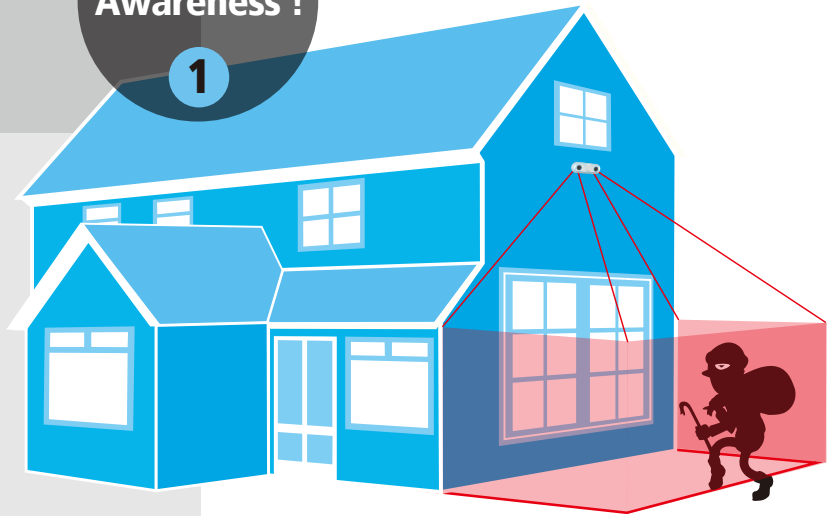
huper 3D Defender System

Break-Ins Prevention

The 3D Virtual Fence detects suspicious intruders in real time and verify the events.

Arming & Threatening

Once the intrusion identified, the system will sound the alarm from the 3D camera and record event video simultaneously. The house owners can receive push notifications from their mobile devices wherever they are.
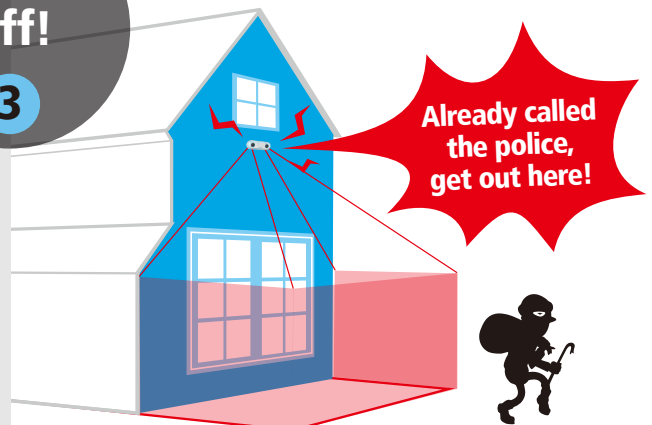
Reaction

The house owner can play audio alarms via mobile phones to threaten intruders, or talk to suspicious intruders to verify their break-in attempt.

Already called the police, get out here!
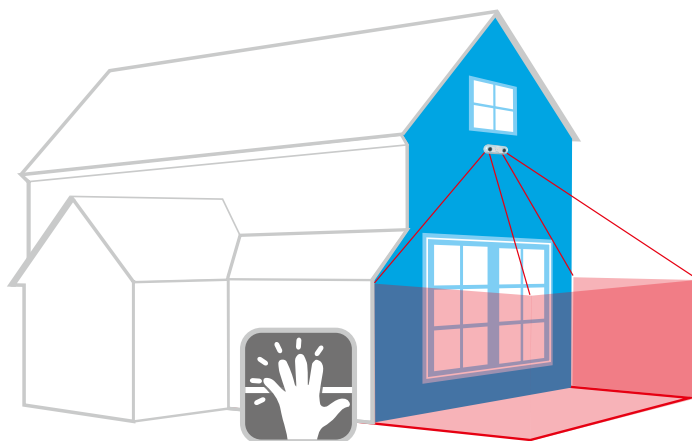
Day / Night & Outdoor Use

- ✔ Water-proof camera design
- ✔ Built-in audio output/speaker for two-way communication
- ✔ High environmental tolerance to dynamic changes : Light/shadow changes, Raining, Snowing and Overlapped Moving Objects, etc.
- ✔ Automatic adjustment to sunlight and low light at outdoors*
- ✔ No extra sensor required

Note：*Compared to IR depth sensors, it's less affected by sunlight and avoid causing false alarms and missing events.
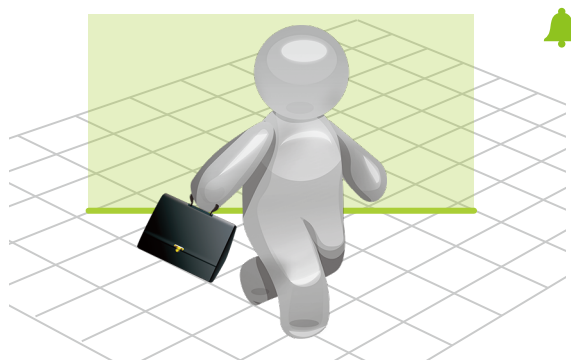
High Accuracy

- ✔ Real-time perceive and analyze intrusion in real position
- ✔ Touch Mode feature builds three-dimensional wall concept to detect moving objects in depth
- ✔ Adjustable height filter for effective detection
- ✔ Support polygon fence with height and bi-directional detection

2D vs. 3D

The 2D vision working in a flat surface can't clearly verify the exact position of moving objects. It easily causes the false alarms.
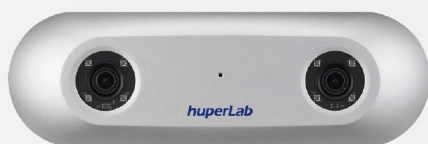
The 3D stereo vision detects moving objects in depth that can better distinguish them from the background for higher accuracy.

System Diagram

3D Camera

LAN

3D Defender

WiFi

At home Way out

Remote App

Hardware Specifications

intel inside™

■ huperEyes 3D Stereo Camera

Product Models	HAO-001N
Mounted Height	2.1m ~ 8.6m
Detection Distance	8m ~ 10m*
Installation Angle	30 ~ 60 degree
Image Sensor	1/3" Sony CCD
Pixel	~ 410K
Resolution	520TVL
Minimum Illumination	0.08Lux / F1.2 / IR ON 0Lux
Video Output	1.0Vp ~ p,75Ω Composite
Audio	Built-in MIC / Speaker
S/N Ratio	>52db(AGC off)
Gamma Correction	0.45
Electronic Shutter	Auto(1/50(60) ~ 1/100,000sec.)
White Balance	ATW, 3200° ~ 10000°K
Lens	2.8mm / F3.6mm / 6mm
Operating Temperature	-10° ~ 50°C
Operating Humidity	RH85%
LED	8 sets (IR 850 nm)
Dimension	230(w) × 75(H) × 50(L) mm
Weight	700g
Supply Voltage Range	DC12V, 10W / 1.5A

*Note: The detection distance will vary based on the camera models and applications.

■ huper 3D Defender System

Product Model	GH4008-SE802
CPU	Intel® Core™ i3-3220 (3M Cache, 3.30 GHz)
Mother Board	ETOP ITX-E24 (PCIe x1)
Channels / Connection of 3D Cameras	8 Channels / 4 Sets of 3D Cameras
HDD	2.5" SATA 500GB HDD
Maximum Storage Capacity	2.5" SATA HDD x2 (Optional)
Front LED	Power LED x1
System RAM	8GB DDR2 RAM
Real Panel Ports	COM1 x1, HDMI x1, VGA x1, LAN x1, USB3.0 x2, AV RJ45 x4, DO x8, Line Out x1, MIC x1, AC Power Plugin x1
Voltage	AC 100 ~ 240V
Power Consumption	90W
Dimension	315(W) x 75(H) x 255(D) mm

Note : Product specifications and product pictures are subject to change without prior notice.

Huper Laboratories Co., Ltd.
10F, No. 577, Linsen N. Rd. Taipei 104, Taiwan   TEL: +886-2-25994041
FAX: +886-2-25994161   http://www.huperlab.com   E-mail: sales@huperlab.com