



Illuminating the **Night**

As infrared illuminator manufacturer, we have developed IR LED Chip and applied to our illuminator so that we surpass the limit of conventional IR camera.
Using our world's first built-in IR LED Chip illuminator, you can experience the unique technology of PARAGONTECH which can deliver outstanding and clear images in impenetrable darkness!



New Technology of Paragon **IR LED**
PARAGONTECH

New Technology of the Paragon IR Chip in Infrared Illuminator

Surpass the limit of conventional IR LED by using the Paragon IR Chip more clearly! Further distance!

- Semi-permanent life span of the Paragon IR Chip
- Deliver the ultimately clear image
- High radiant density & intensity by optical lens



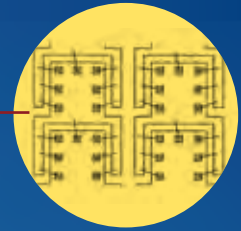
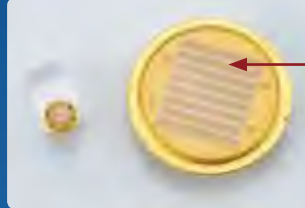
Feature	Paragon IR illuminator	Other IR illuminator
Main components	IR chip specially developed by R&D team of ParagonTech	Normal Giant LED purchased from LED manufacturer
Target distance	Designed aiming long distance	Designed aiming short distance
Target Purpose	Night time surveillance	Short range communication
Maximum visibility range	Max. 500m combined 3 units (1640ft)	150m(429ft)
Power consumption	Under 12W (150m/4 units)	Over 24W (150m/ 162 units)
Life span of IR illuminator	5 years	Normally 1year~Max. 2 years
Life span of LED chip	Over 5 years	Normally 1year~Max. 2 years
Heat resistance	Stable operation in the limit of electric current by sufficient intensity of radiation	Excessive operation exceeding the limit of electric current



1st generation Paragon IR Chip technology

ParagonTech has developed Integrated power LED (a Light-Emitting Diode array package with heat radiation) performance in one chip by using efficient array to enhance LED performance.

Paragon IR chip (IR35, IR120chip)



Outermost array of LED

- Light Emitting Diode array package efficacy
- Semi-permanent life span according maximized heat radiation

2nd generation Paragon IR Chip technology

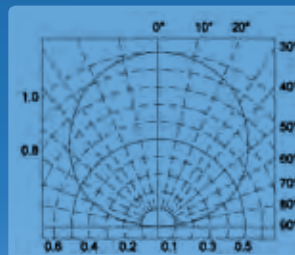
Max. Distance : 30m(Max.)

Consumption : 3W

Life span of LED chip : Over 5 years

Wave length : 740nm / 850nm / 940nm

LED chip size : 1.5 x 1.5mm (40mil)



Infra-Red Illuminator



PI-3000

- **Visible distance & Beam Angle** : 300m(984ft), 15° / 220m(721ft), 25° / 140m(459ft), 60°
- **Wave Length** : 740nm, **850nm**, 940nm
- **Power Consumption** : Under 48W,
Max DC 12V/AC 24V, 4A
- **Weight** : 3kg
- **Dimension** : 196(W) x 250(L) x 88.5(H)mm



DC12V & AC24V dual voltage available

Adjustable illumination intensity

Adjustable built-in photocell

2 or 3 units connection available

IP67



Flexible and Easy installation

Scientific structure and various angles covering over 180° provide user more convenient usage and installation environment.



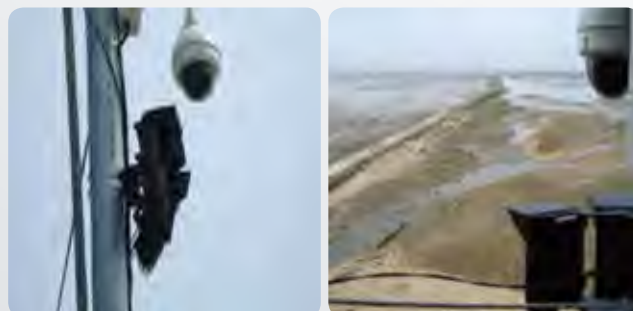
Superb illumination in long range

Paragontech's special LED delivers infrared illumination covering over 250m (1unit) to 500m (3units).



Paragontech's proprietary Technology of IR LED

Paragontech concentrated on IR LED technology over one decade to develop such a powerful and economic technology.





We will serve the users with the highest quality products
To satisfy its customers with the best quality products



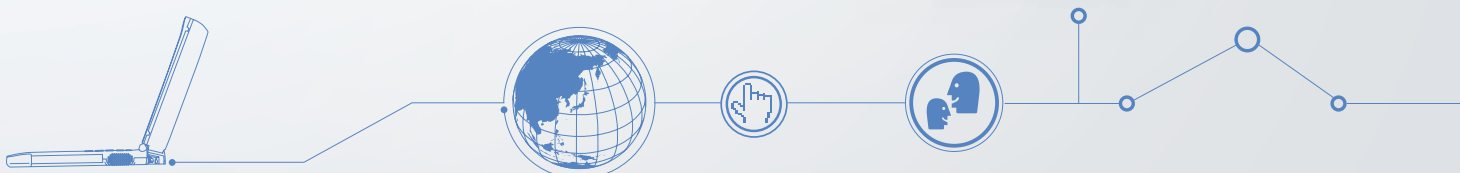
PI-2000

- **Visible distance & Beam Angle** : 220m(721ft), 15° / 150m(492ft), 25° / 110m(360ft), 60°
- **Wave Length** : 740nm, **850nm**, 940nm
- **Power Consumption** : Under 24W,
Max DC 12V/AC 24V, 2A
- **Weight** : 1.65kg
- **Dimension** : 152(W) x 205(L) x 67.5(H) mm



PI-1000

- **Visible distance & Beam Angle** : 100m(328ft), 25° / 60m(196ft), 60°
- **Wave Length** : 740nm, **850nm**, 940nm
- **Power Consumption** : Under 12W,
Max DC 12V/AC 24V, 1A
- **Weight** : 0.87kg
- **Dimension** : 112(W) x 153.5(L) x 65.5(H) mm



Infra-Red Illuminator



HI-1508

- **Visible distance & Beam Angle** : 150m(492ft), 15°
100m(328ft), 25° / 60m(196ft), 60°
- **Wave Length** : 740nm, **850nm**, 940nm
- **Power Consumption** : Under 18W, Max DC12V / 1.5A
- **Weight** : 1.7kg
- **Dimension** : 110(W) x 143(L) x 119(H)mm



HI-0808

- **Visible distance & Beam Angle** : 130m(426ft), 20°
100m(328ft), 40° / 80m(262ft), 60°
- **Wave Length** : 740nm, **850nm**, 940nm
- **Power Consumption** : Under 18W, Max DC12V / 1.5A
- **Weight** : 1.7kg
- **Dimension** : 110(W) x 143(L) x 119(H)mm



HI-0708

- **Visible distance & Beam Angle** : 150m(492ft), 15° /
100m(328ft), 25° / 60m(196ft), 60°
- **Wave Length** : 740nm, **850nm**, 940nm
- **Power Consumption** : Under 12W,
Max DC 12V/AC 24V, 1A
- **Weight** : 0.9kg
- **Dimension** : 111(W) x 153.5(L) x 72(H)mm

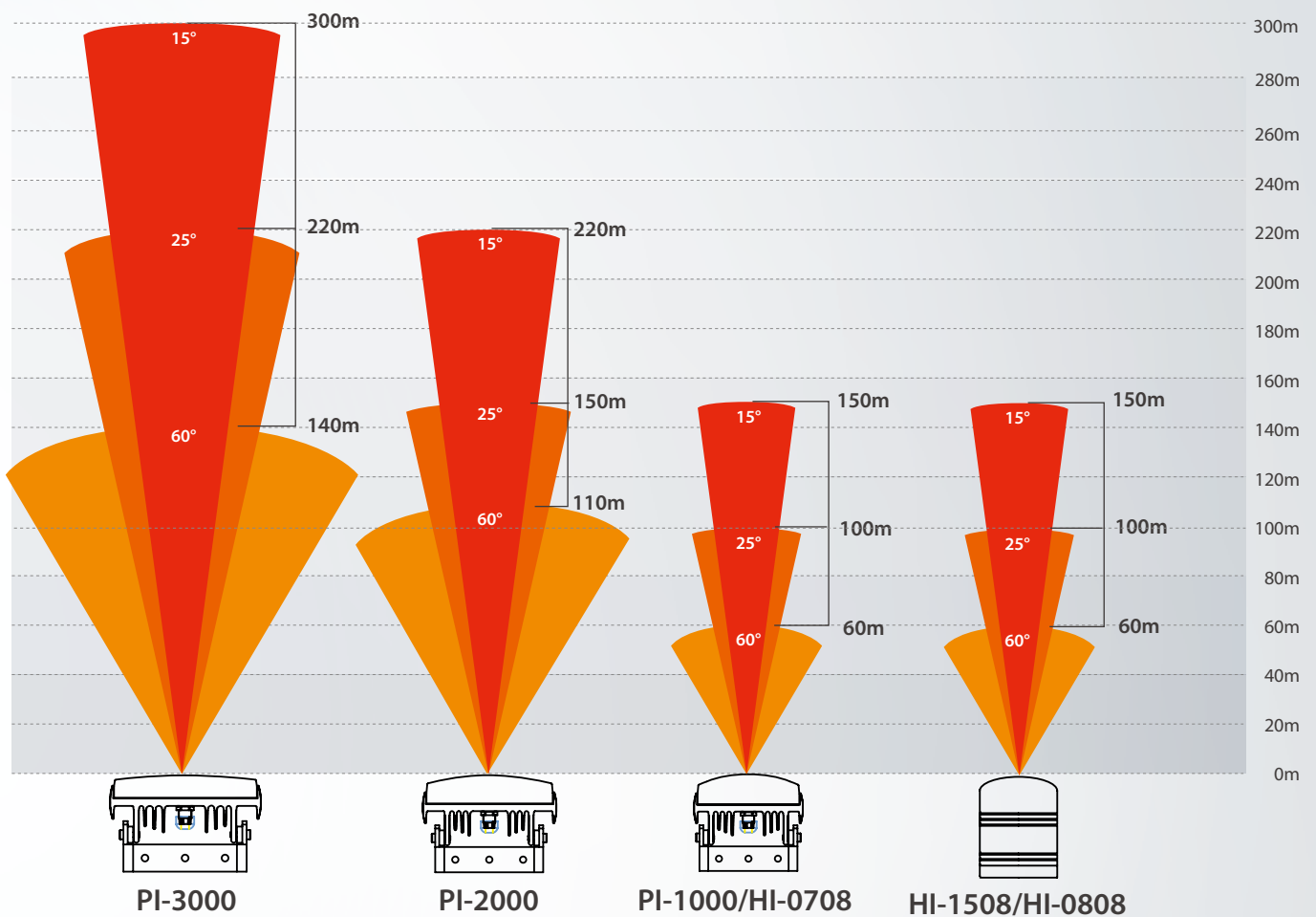




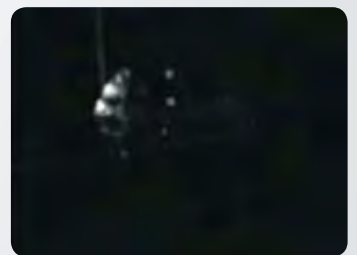
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Paragon Infra-Red Illuminator Distance Chart



100m Field test (IR illuminator on/off)



500m Field test (IR illuminator on [Zoom out/in] & off)



Whitelight Illuminator

Offering powerful lighting and longer life span, PW series are ideal for locations where professional monitoring in color image is required with low power consumption and brighter lighting in long ranged area at pitch-black night time.



PW-3000

- **Visible Distance & Beam Angle** : 500m(1,148ft), 15° / 290m(951ft), 25° / 190m(623ft), 60°
- **Power Consumption** : Under 96W, Max DC16V 6A
- **Weight** : 3kg
- **Dimension** : 196(W) x 250(L) x 88.5(H)mm



DC16V & AC24V dual voltage available

Adjustable illumination intensity

Adjustable built-in photocell

2 or 3 units connection available

IP67



PW-2000

- **Visible Distance & Beam Angle** : 270m(885ft), 15° / 190m(623ft), 25° / 140m(459ft), 60°
- **Power Consumption** : Under 48W, Max DC16V, 3A
- **Weight** : 1.65kg
- **Dimension** : 152(W) x 205(L) x 67.5(H)mm





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PW-1000

- **Visible Distance & Beam Angle** : 130m(426ft), 25° / 90m(295ft), 60°
- **Power Consumption** : Under 24W, Max DC16V, 1.5A
- **Weight** : 0.87kg
- **Dimension** : 112(W) x 153.5(L) x 65.5(H)mm



HW-0700

- **Visible Distance & Beam Angle** : 180m(492ft), 15° / 130m(426ft), 25° / 90m(295ft), 60°
- **Power Consumption** : Under 24W, Max DC16V/AC24V, 1.5A
- **Weight** : 0.87kg
- **Dimension** : 111(W) x 153.5(L) x 72(H)mm



Real Application Case

This is a completely different concept of camera from conventional day & night one.
Under city light conditions or glaring headlights, it can show clear image without blooming effect.

TIP! Solutions

- Secluded areas or crime-ridden districts like parks, schools, buildings or houses
- Number plate surveillance at the entrance of buildings or parking lots



Conventional NPR
(Number Plate Recognition)



Building Entrance

Image NPR (Number Plate Recognition) Capture
Camera+Paragon IR Illuminator (Building Entrance)



Paragon IR Camera



Conventional IR Camera

Application



Residential Area



Park



School Zone



Border Surveillance



Parking Lot



Traffic Zone

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TIP! Solutions

- Places where one needs to conduct long distance surveillance at night time like Military areas, Mountainous areas or Construction sites.
- The place where one needs to conduct night time surveillance with 0 Lux darkness conditions like Powder magazines, armory in military areas or outskirts of the city.



Military Base



Coast Area



Power Plants



City Center



Sea Port



Rail Road



Water Reservoirs



Airport



New Technology of Paragon **IR** LED

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The Specification is based on product of EWHAGLOBAL CO., LTD.
Design and specification are subject to change without notice.