CENTRIX TECHNICAL WHITE PAPER:

Illuminators Technology

Light up your view in both ways

Full range LED illuminators for all your surveillance lighting requirements

• White Light • Infra Red •

MODELS:
IL30-45, IL40-60, IL50-45, IL120-360, WL50-45, VSI70-25, VSI80-60, VSI170-25, VWL60-60, VWL150-60

HYBRID ARRAY LIGHT SOURCE



Hybrid Array
Light Source

The LED chip uses 140 pieces of LED (Array Light Source) wafer mounted of a highly conductive ceramic board which is then enclosed in a copper enclosure.

This design ensures lower power consumption, higher light output as well as improved lifespan of the chip as heat is dissipated much more efficiently through the use of a copper enclosure.

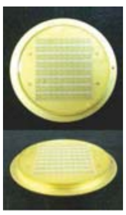
Array Light Source

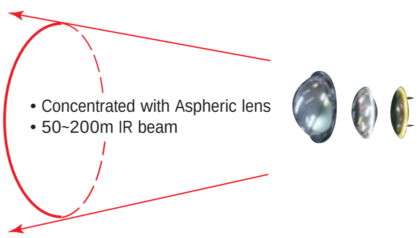
LED

HID

HYBRID LED

HYBRID LED



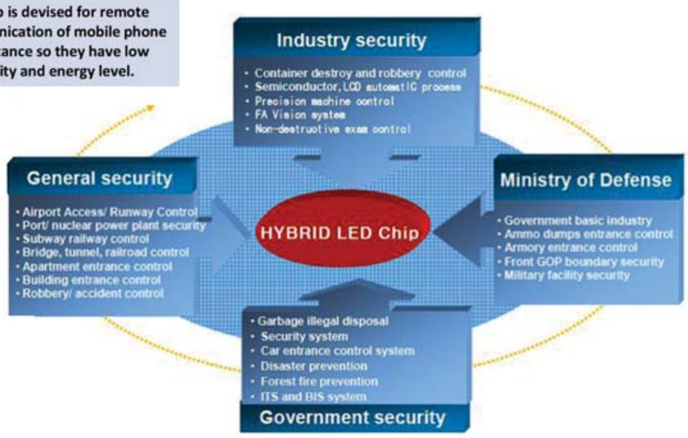


HYBRID LED

- Integrated multiple LED in one single chip
- Develope IR Illuminators with Hybrid LED
- Semi permanent life time, various application for security solution and equipment
- Efficiency
  - Hybrid LED has much more powerful energy from 5W up to 100W
- Durability
  - Designed by filming on the gold pattern of the ceramic board and metal stem
  - Highest heat resistance
- Easy Configuration
  - Easily combined with optical equipment such as lens
- Convenient
  - A small single package can illuminate IR beam reaching over 200m with low consumption

Hybrid Array LED Chip VS Conventional IR LED

	Centrix Hybrid Array LED Chip	Conventional IR LED
Illuminating Source	Hybrid Chip developed by state of art semiconductor own technology	Simple arrangement of IR LED which is using for remote controller
Method of Transmission	Concentrate of light by using optical (spherical & aspherical) lens	Simple arrangement of LED lamp without optical science
Life Span	• Semi-permanent lifetime of LED chip (10 years of guarantee period) • Easy emission of heat from illuminator and extension of camera's lifetime due to separation of camera & illuminator	• Short lifetime of LED (2year) • Reduction of camera's lifetime due to direct transmission of high temperature of LED heat to the camera
Radiant Intensity	Due to high radiant density & intensity. IR rays from the chip is 20% more reached to the target than conventional LED.(only 36 pieces of LED in Hybrid chip can illuminate up to 100m)	Due to low radiation density & intensity. There are big loss of IR rays to the target.
Beam Angle	Wide beam angle by optical lens when illuminating long distance	Narrow beam angle when illuminating long distance
Heat Resistance	Stable operation due to high heat resisting temperature & enough radiation intensity	Easy breakdown due to excessive heating & electric current to low price LED made by plastic
Aim of Development	Hybrid LED chip is exclusively devised for illuminator so that radiant intensity & density energy level and heat resisting power is definitely different with conventional IR LED	Conventional LED lamp is devised for remote controller, telecommunication of mobile phone or sensor for short distance so they have low radiant density, intensity and energy level.



Hybrid IR CCTV Application

CHECK OUT THE DETAILS WITH OUR SALES PERSONNEL OR MAIL US AT: sales@centrixsecurity.com