iUV
Renovation of UV technology

COMPANY PROFILE

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Panyu District,Guangzhou City, Guang Dong Province,China.

CONTENT

About Us

More than 15 years uv curing system's manufacturer...

ABOUT US

Company Introduction

IUV (Guangdong Ruixin Electronic Technology Co,.Ltd) specialized in researching and developing, producing Led uv curing system and mercury uv curing system for flexo printing, intermittent offset printing, and sheeted-fed offset printing since 2007. We has grown rapidly with the distributor in Germany, Italy, Spain, the USA, Turkey, and Denmark and serving well-known brands of Gallus, Nilpeter, BOBST, and OMET etc.

Research & Developed Department

5S Workshop Management System

After-sales Technicial Support Team

Strict Quality Management System

ABOUT US

IUV's Partners

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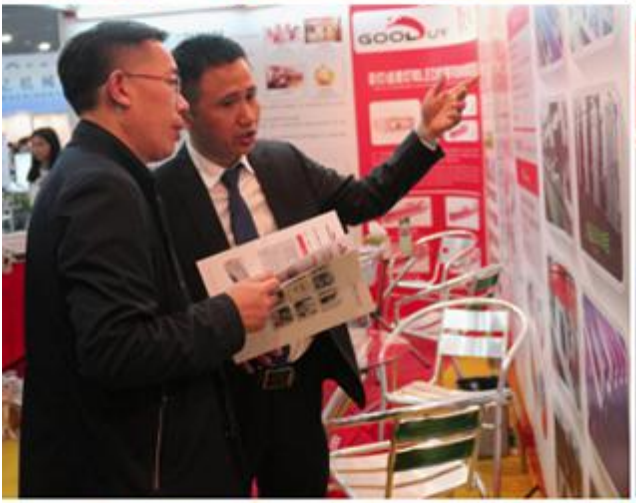
mps
MARK ANDY
gallus
BOBST
Spande
OMET
nilpeter
RHYGUAN
DOWELL
SAPA 赛帕
Brotech
KONICA MINOLTA
WJPA 万杰印刷机械
JMD 精美达科技 JMETECH TECHNOLOGY
HS MACHINE
DJKJM® 华达机械 HUADA MACHINERY
WEIGANG



World-wide Customer Case

IUV has more than 100 partners, more than 600 customer cases, distributed in more than 50 countries around the world....

WORLD-WIDE CUSTOMER CASE

Flexo Printing Machine

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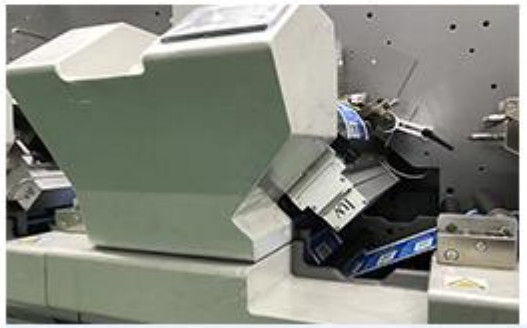
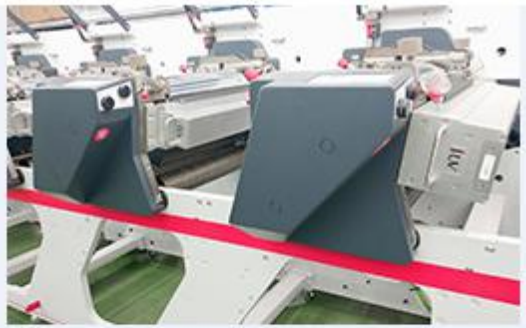
Nilpeter Flexo Printing Machine FA Series




BOBST Flexo Printing Machine M5

OMET Flexo Printing Machine X4


OMET Flexo Printing Machine IFLEX


BOBST Flexo Printing Machine M1

WORLD-WIDE CUSTOMER CASE

Flexo Printing Machine

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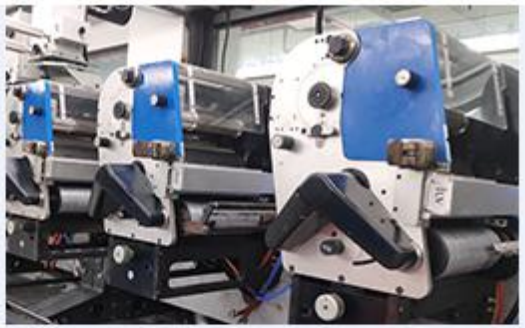
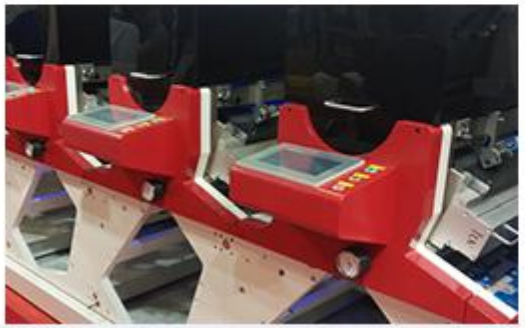
OMET Flexo Printing Machine X6


WEIGANG Flexo Printing Machine




Gallus Flexo Printing Machine ECS340


Dowell Flexo Printing Machine

BENGRAPHIC Flexo Printing Machine

WORLD-WIDE CUSTOMER CASE

Offset Printing Machine

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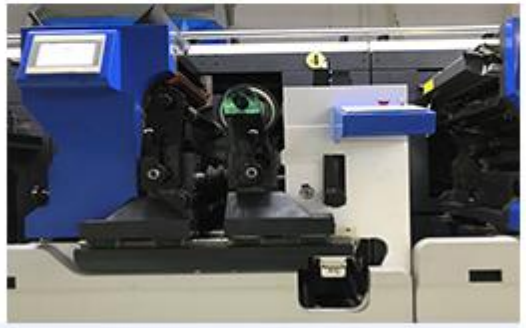
WEIGANG Intermittent Offset Printing Machine


ZONTEN Intermittent Offset Printing Machine

HUADA Intermittent Offset Printing Machine


WANJIE Intermittent Offset Printing Machine

Zhongjing Offset & Flexo Printing Machine


Intermittent Letterpress Printing Machine

WORLD-WIDE CUSTOMER CASE

Retrofit Series

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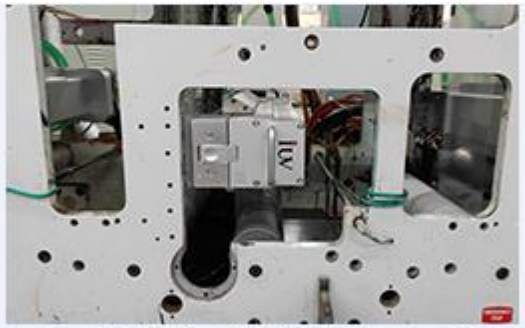
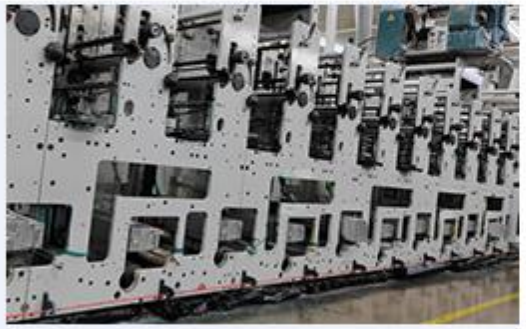


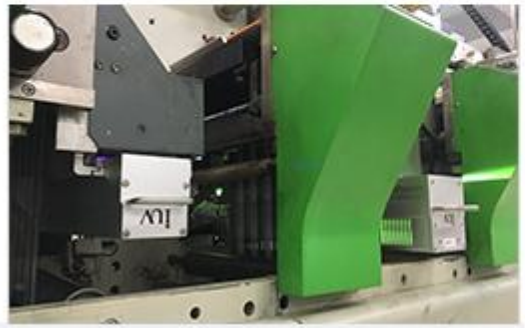


Mark Andy Flexo Printing Machine 2200 Series

Japan SANKI Intermittent Letterpress


OMET Flexo Printing Machine X4


Mark Andy Flexo Printing Machine P5 Series

BOBST Flexo Printing Machine M3

WORLD-WIDE CUSTOMER CASE

Others

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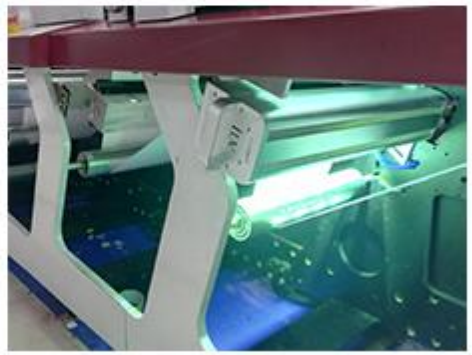
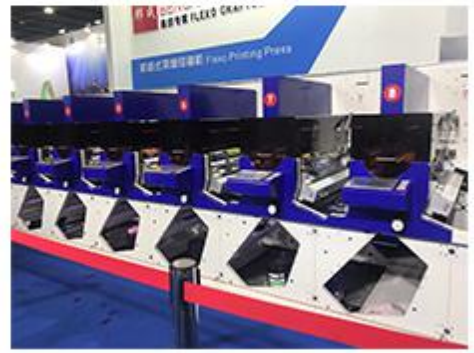



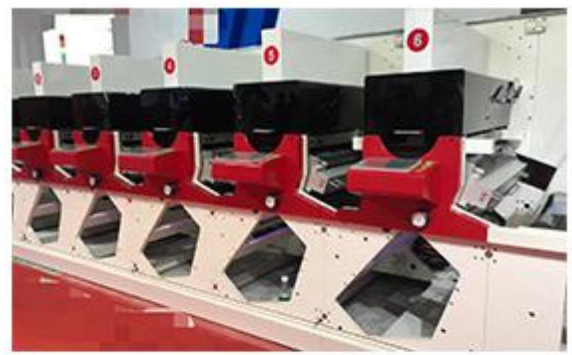

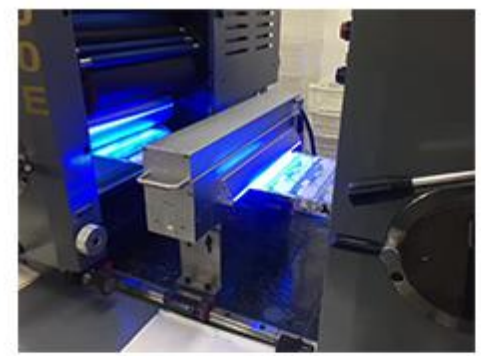

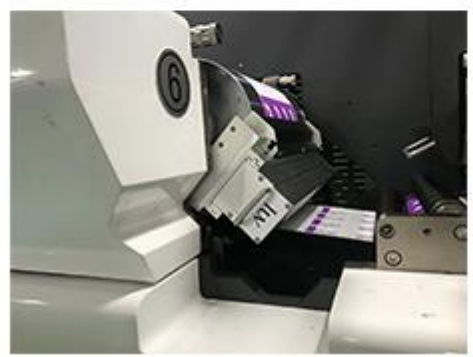
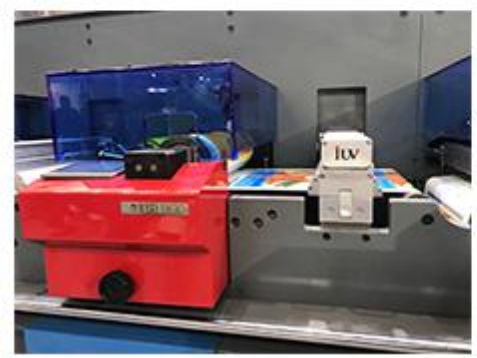

IUV's Products

Specialiezed in producing Led uv curing system, mercury uv curing system, Led & mercury inchangable uv curing system...

IUV'S PRODUCTS

IUV-FP/L

SPECIFICATION:

Curing Speed	200M/min
Effective Width Of LED	265mm~1500mm
Rated Power Of LED (one unit)	2kw~15kw
Wave Length Of LED	365nm、385nm、395nm
Optimum Curing Distance Of LED	5~8mm
Cooling System	Water cooling

SUITABLE MODEL:

- Flexo printing machine

IUV'S PRODUCTS

IUV-FP/M

- **SPECIFICATION:**

Curing Speed	200M/min
Effective Width	280mm~850mm
Rated Power (one unit)	3kw~15kw
Main Wave Length	365nm, 385mm
Optimum Curing Distance	15mm
Cooling Systemt	Air cooling

- **SUITABLE MODEL:**
  - Flexo printing machine

IUV'S PRODUCTS

IUV-PS/L

SPECIFICATION:

Curing Speed	200Print/min
Effective Width Of LED	265mm~1500mm
Rated Power Of LED (one unit)	1.5kw~10kw
Wave Length Of LED	365nm、385nm、395nm
Optimum Curing Distance Of LED	5~8mm
Cooling System	Air cooling

SUITABLE MODEL:

- Intermittent offset printing machine

IUV'S PRODUCTS

IUV-PS/M

SPECIFICATION:

Curing Speed	0-200Print/min
Effective Width	280mm~850mm
Rated Power (one unit)	3kw~15kw
Main Wave Length	365nm
Optimum Curing Distance	15mm
Cooling System	Air cooling

SUITABLE MODEL:

- Intermittent offset printing machine

IUV'S PRODUCTS

Led And Mercury Lamp Interchange

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SPECIFICATION:

IUV's automatic interchange Hybrid system is patented and self-developed.

Ink relatively complex various types of curing applications, not only enjoy energysaving benefits,but also ensure all kinds of complex curing requirements.

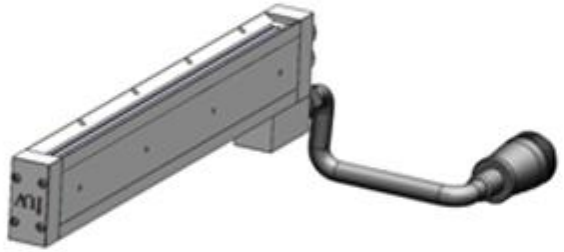
The system can automatically identify the type of lamp, automatically switch betweenpower supply and cooling, can easily copewith the complex process of flexo printing curing system requirements

SUITABLE MODEL:

- Intermittent offset printing machine
- Flexo printing machine
- Width offset printing machine
- Digital printing machine

IUV'S PRODUCTS

Pre-curing Led



PRE-CURING LED - WATER COOLING

- **SUITABLE MODEL:**
  - Digital inkjet equipment
  - Surface curing of high speed inkjet equipment
- **SPECIFICATION:**

Curing Speed	150m/min
Effective Width Of LED	56mm~1600mm
Rated Power Pf LED (one unit)	0.3kw~1.5kw
Wave Length Of LED	365nm、385nm、395nm
Optimum Curing Distance Of LED	3~5mm
Cooling System	Water cooling

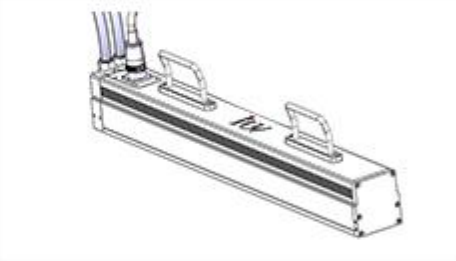
PRE-CURING LED - AIR COOLING

- **SUITABLE MODEL:**
  - Digital inkjet equipment
  - Surface curing of high speed inkjet equipment
- **SPECIFICATION:**

Curing Speed	150m/min
Effective Width Of LED	50mm~600mm
Rated Power Pf LED (one unit)	0.3kw~1.5kw
Wave Length Of LED	365nm、385nm、395nm
Optimum Curing Distance Of LED	3~5mm
Cooling System	Water cooling

IUV'S PRODUCTS

Other Products



IUV-POWER PLUS

SUITABLE MODEL:

- Sheet-fed offset printing machine

SPECIFICATION:

Curing Speed	18000Print/H
Effective Width Of LED	600mm~1200mm
Rated Power Of LED (one unit)	7.5kw~15kw
Wave Length Of LED:	365nm、385nm、395nm
Optimum Curing Distance Of LED	60~100mm
Cooling System	Water cooling

LED FOR HIGH-SPEED INKJET

SUITABLE MODEL:

- Variours types of high-speed inkjet equipment

SPECIFICATION:

Curing Speed	150m/min
Effective Width Of LED	50mm~600mm
Rated Oower Of LED (one unit)	0.5kw~6kw
Wave Length Of LED:	365nm、385nm、395nm
Optimum Curing Distance Of LED	5~8mm
Cooling System	Water cooling

LED FOR HIGH-SPEED INKJET

SUITABLE MODEL:

- Satellite printing machine

SPECIFICATION:

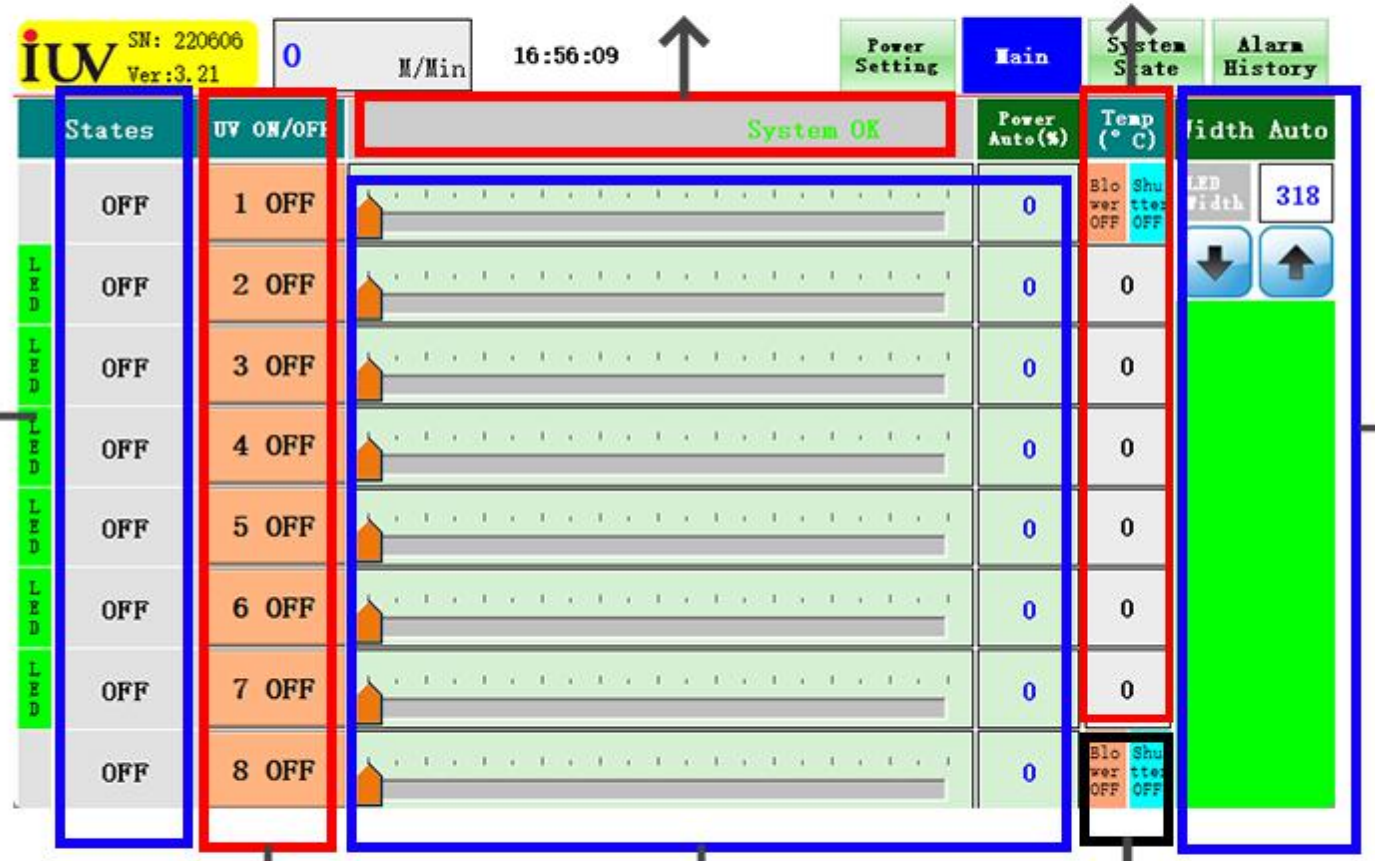
Curing Speed	120m/min
Effective Width Of LED	260mm~600mm
Rated Oower Of LED (one unit)	2.8kw~6.2kw
Wave Length Of LED:	365nm、385nm、395nm
Optimum Curing DistanceOf LED	5~8mm
Cooling System	Water cooling

IUV's Control System

About IUV's self-developed system....

IUV'S CONTROL SYSTEM

Main Control Screen



LED device status display

Real-time monitoring of LED light box temperature

LED status display

LED light irradiation width and position control

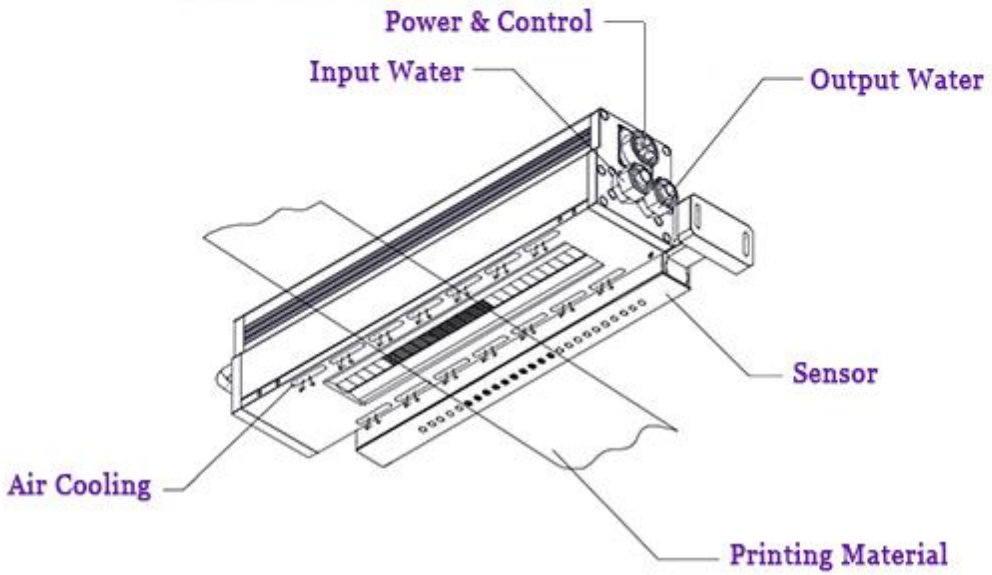
LED switch light control

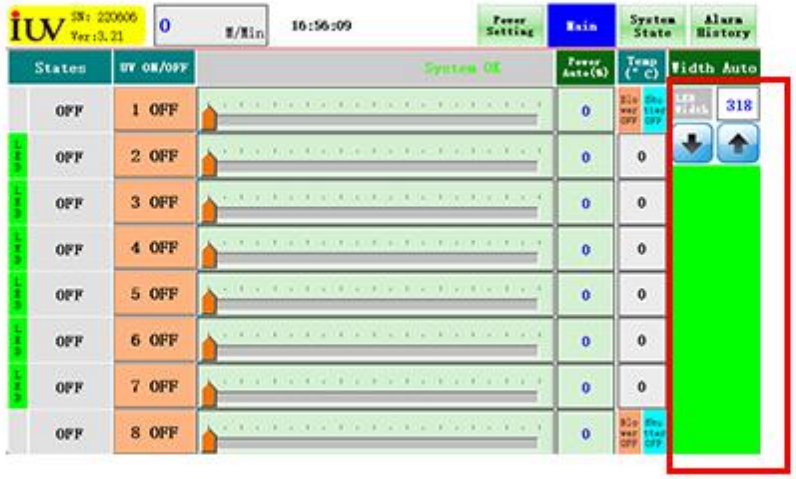
LED and mercury lamp power control, accurate to 1%

Mercury lamp exhaust and shutter control

IUV'S CONTROL SYSTEM

Automatic Control System



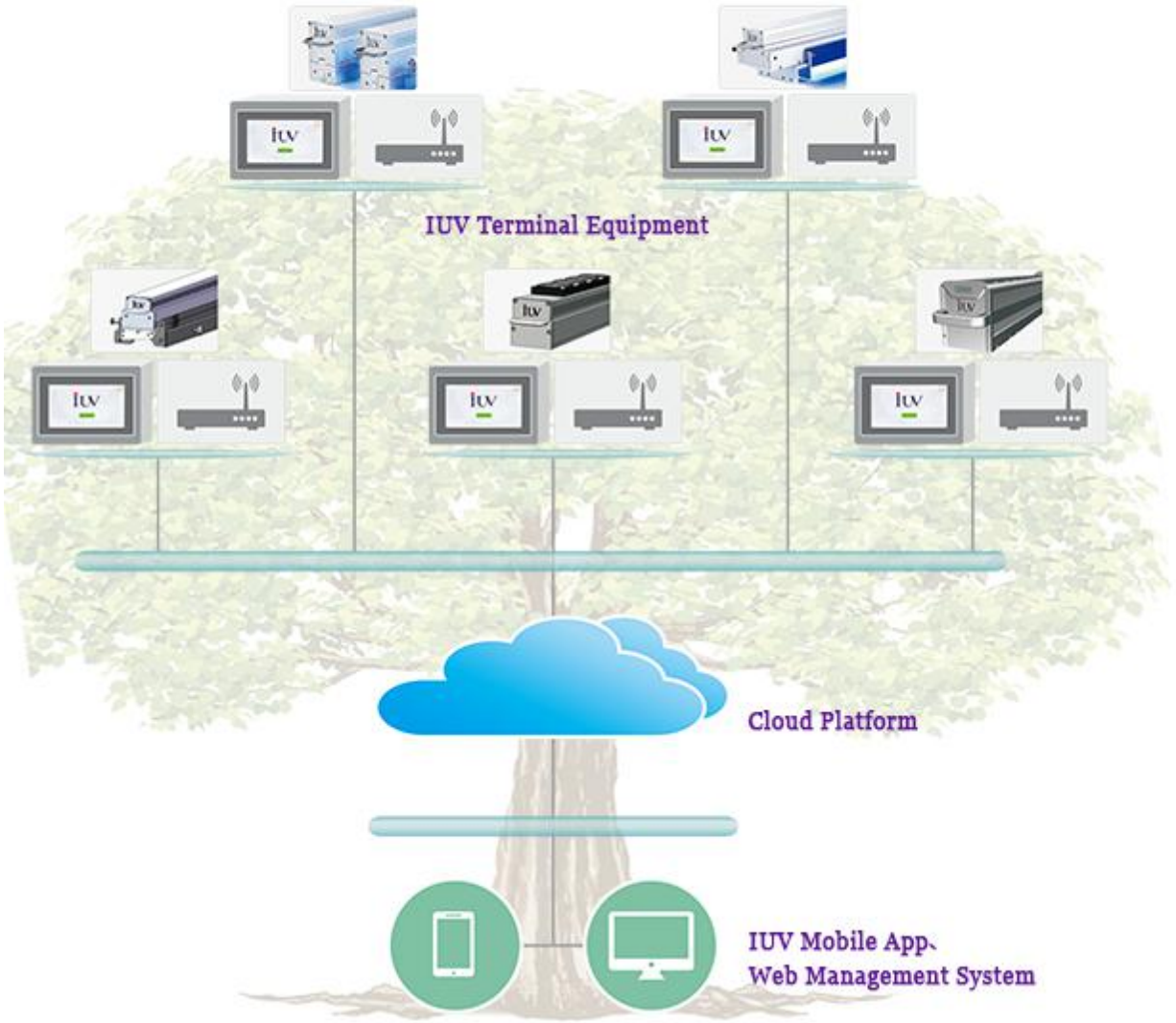


IUV's automatic width measurement system is patented and self-developed.UV equipment has the function of automatic detection of paper width and paper position, LED can achieve many levels of automatic control according to the sensor (with the material position automatically lit up, without the material position automatically closed), more effectively save energy and reduce the material temperature. Therefore, this function can maximize the power saving, reduce the temperature of the material and improve the life of the LED chip.

- **IUV'S LED LIGHTING AREA AUTOMATIC CONTRL SYSTEM**

IUV'S CONTROL SYSTEM

Remote Monitoring Function



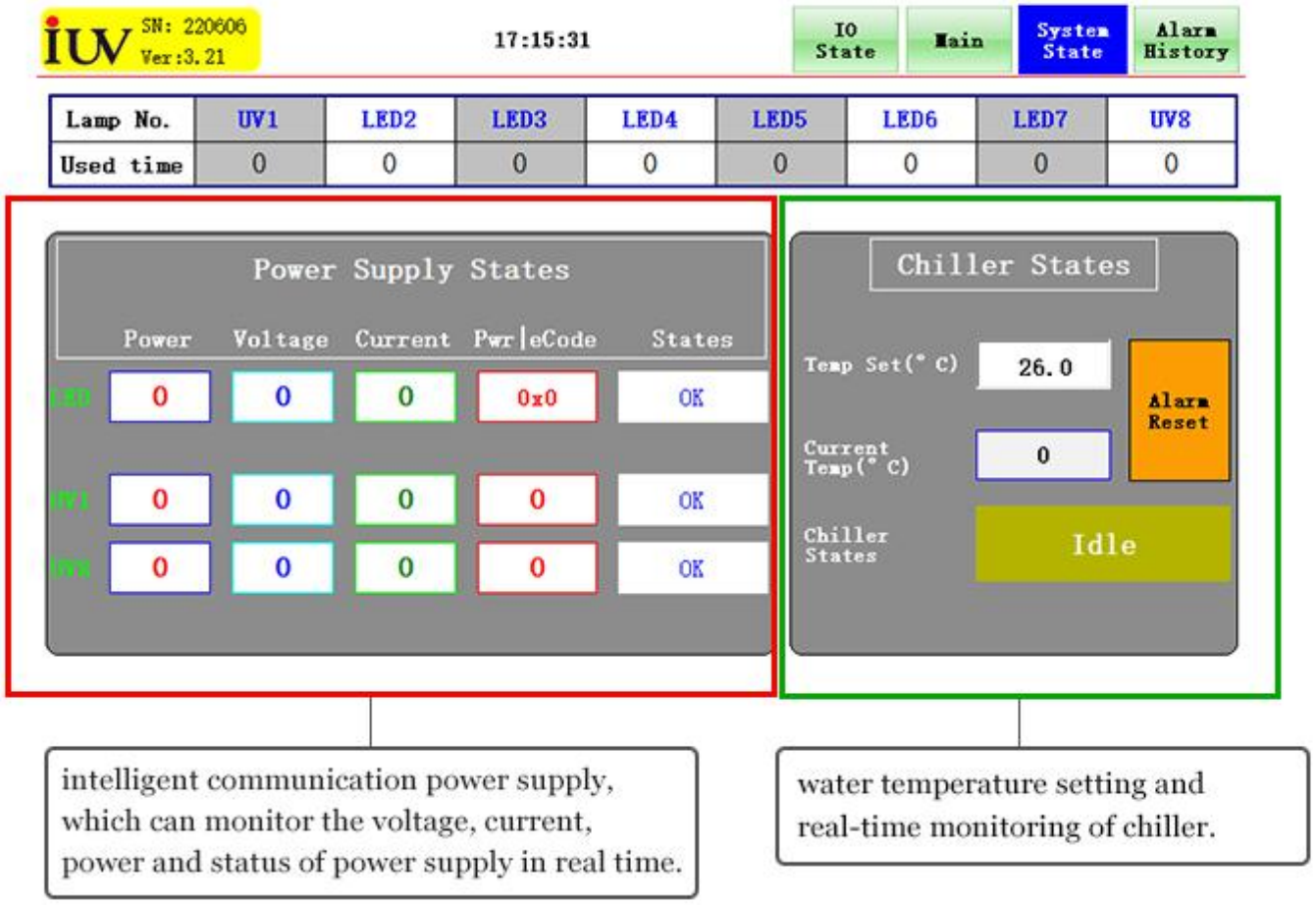
In order to ensure the stability of global IUV customers' equipment operation, timely troubleshooting,remote OTA software upgrade and other future digital management needs, IUV has independently developed a set of perfect remote equipment management system. This system enables IUV devices around the world to connect to the cloud server through network cables, WIFI, 5G and other Internet access: It can easily realize remote real-time information collection, fault diagnosis,software update and other functions through PC or mobile phone terminals. This system can help customers quickly diagnose and solve system failures, ensure efficient production of customers, on the other hand, provide real-time data for digital management of customers' factories.

IUV'S CONTROL SYSTEM

Chiller & Power Monitoring System

- **PHOTOS**

- **POWER SUPPLY AND WATER COOLER MONITORING SCREEN**



Others

Industrial knowledge about UV curing system...

OTHERS

Comparison Of Technical Of World-wide LED Manufacturers

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Items	IUV	GEW(UK)	Cool UV	Yelp	Huaxun	UV Light	HGUV
Power Supply	independent research and development of digital power	independent research and development of digital power	outsourced 56V switching power supply	outsourced 48V switching power supply	outsourced 48V switching power supply	outsourced 48V switching power supply	outsourced 48V switching power supply
Packging Technology	COB	COB	COB	lamp beads	lamp beads	lamp beads	lamp beads
Optical Processing	Focusing lens	No	Focusing lens	No	No	No	No
UV Energy Density	25W/square centimeter	20W/square centimeter	25W/square centimeter	15W/square centimeter	15W/square centimeter	15W/square centimeter	15W/square centimeter
LED UV Wavelength	Mixed Wavelength (365+385+395)	Mixed Wavelength (365+385+395)	Single Wavelength (365,385,395)	Single Wavelength (365,385,395)	Single Wavelength (365,385,395)	Single Wavelength (365,385,395)	Single Wavelength (365,385,395)
LED Chip	LG/Seoul	LG/Seoul	LG/Seoul	LG/Epiled	LG/Epiled	LG/Epiled	LG/Epiled
Mercury Lamp R&D Capability	Yes	Yes	No	No	No	Yes	Yes
Power Communication Function	Yes	Yes	No	No	No	No	No
Chip Layout	All series connection+Constant current source control	All series connection+Constant current source control	series connection+parallel connection	series connection+parallel connection	series connection+parallel connection	series connection+parallel connection	series connection+parallel connection
LED and Mercury Lamp Power Supply Adaptive	Power adaptation	Power adaptation	No	No	No	No	No
Power Control Accuracy	1%	1%	5%	10%	10%	10%	10%
LED Swith Light Surged Shock	Soft start without surge	Soft start without surge	Hard start surge shock	Hard start surge shock	Hard start surge shock	Hard start surge shock	Hard start surge shock

OTHERS

Comparison Of LED And Mercury Lamps

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	LED	MERCURY
Economic Benefits	1、Led-uv can turn on (off) the light instantly, the light source can be turned on instantly during printing, and turned off instantly during standby, and the work efficiency is greatly improved.	1、Traditional mercury lamps need to be warmed up for 1 min before they turned on and cooled down for 4 mins before they turned off. To improve the efficiency of printing, many users usually keep the UV light source on, resulting in lots of waste.
	2、Led-uv has lower energy consumption and high effective luminous efficiency, which can reduce energy consumption by 70% to 80%.	2、Mercury lamps have low luminous efficiency. Farther the useful UVA band, they also generate UVB, UVC and a large amount of infrared. The energy waste is serious and the use cost is high.
	3、Led-uv equipment wears less and has a long service life. The service life of the light source is as high as 20,000 to 50,000 hours. It is almost a one-time investment without replacement.	3、The service life of high-pressure mercury lamps and metal halide lamps is generally about 1000 hours, and the light source is replaced frequently.
	4、Led-uv has higher curing consistency, is controllable, predictable, has better weather resistance,and is more flexible.	4、The ultraviolet energy emitted by the mercury is stronger in the middle, and the energy at the two ends is lower, and the uneven energy distribution will affect the quality of the ink; the mercury can only be turned on and off, and cannot emit light locally.
	5、Led-uv light source has high photo electric conversion efficiency, low heat generation, and less heat transfer to the printed object. The surface temperature of the material can be controlled at about 45 °C, which can effectively prevent the printed product from shrinking and deforming due to over heating, so as to achive a higher temperature.Overprint accuracy.	5、Mercury lamps have low luminous efficiency, high calorific value, and high temperature of the printing substrate is easy to deform, which easily affects the printing accuracy.
	6、Higher reliability and lower maintenance costs.	6、Relatively low reliability and high maintenance costs.

OTHERS

Comparison Of LED And Mercury Lamps

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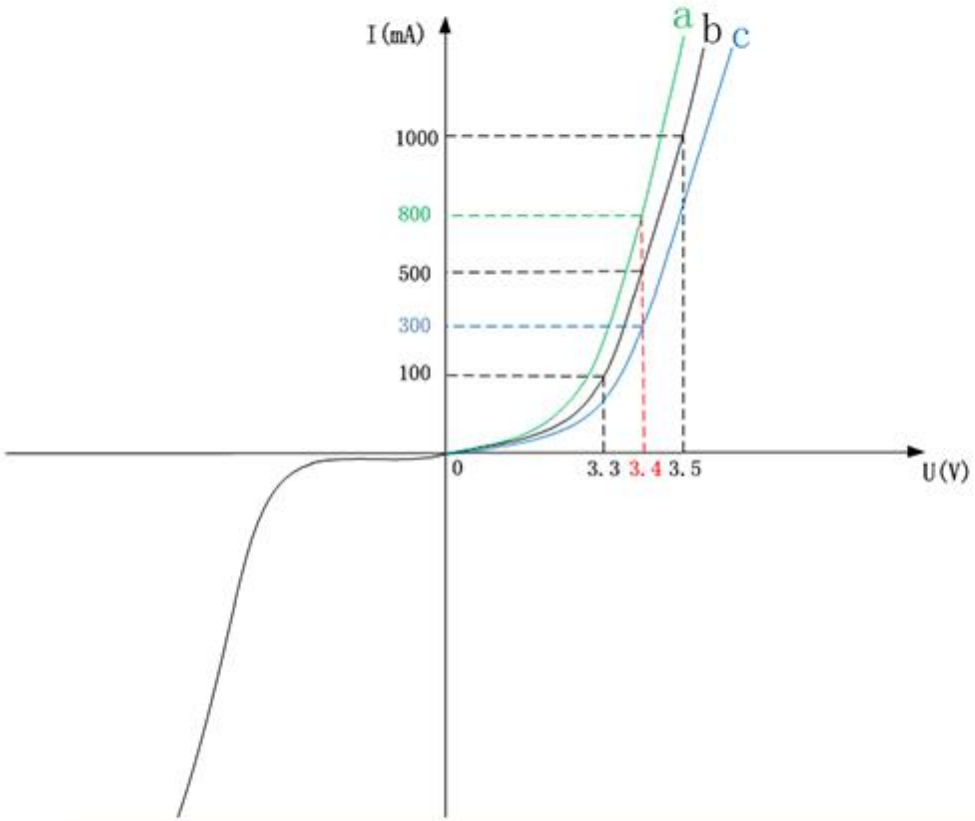
	LED	MERCURY
Environ-mental Friendly	1、LED-UV adopts water-cooled heat dissipation method without large air-cooling device, which can effectively reduce air exchange and dust spread.	1、The mercury lamp generates a lot of heat in the process of using, and needs to install a strong air cooling device, which is noisy and polluted by dust.
	2、The light-emitting body of LED-UV is a solid -state semiconductor device, which is free of harm -ful substances and mercury pollution in product -ion and use.	2、Mercury lamps are made by adding mercury into a vacuum quartz tube, and the production, use and recycling are all likely to cause environmental pollution.
	3、The ultraviolet wavelength generated by LED-UV is very narrow and does not generate short-wave ultraviolet light, so there is no UVB and UVC during the curing process, no ozone is generated, no need to install auxiliary devices such as deodo-rizers or exhaust ducts, and it can maintain clean work. environment, which makes LED-UV curing devices also available in factories with dense sur -rounding buildings.	3、The ultraviolet light generated by the mercury lamp has a wide wavelength, covering various wavelength bands such as UVA, UVB, and UVC, and will generate ozone. It is necessary to add auxiliary devices such as deodorization devices or exhaust ducts.
	4、LED-UV has a narrow wavelength and is close to the visible wavelength of violet light, with little harm to the body	4、The spectrum produced by mercury lamps is com -plex and contains deep ultraviolet light. Long-term exposure to its environment will cause harm to the human body and cause cancer risks.

OTHERS

The Volt-ampere Characteristic Curve Of The LED Chip



- **LED FEATURE 1:**

  The LED chip is a voltage-sensitive component, and a weak voltage change will cause a huge change in current. As shown in curve b in the picture:when the power supply voltage is 3.3v, 3.4v, and 3.5v, the chip current is 100mA, 500mA, and 1000mA respectively.

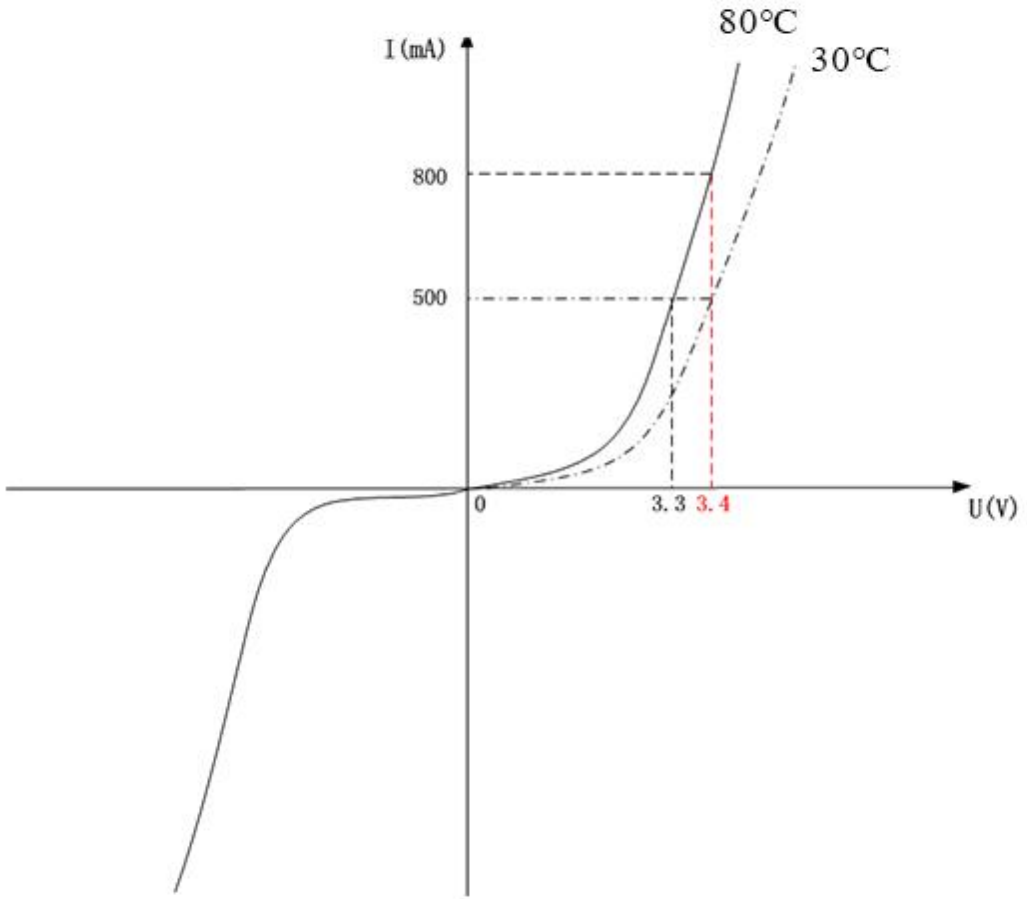
- **LED FEATURE 2:**

  The manufacturing process of the LED chip determines that the characteristic curve of each LED chip is inconsistent,as shown in a, b, and c in the picture: the same power supply voltage of 3.4V. The currents of the three chips are 800mA, 500mA, and 300mA respectively

- **CONCLUSION:** It can be seen from the volt-ampere characteristics of the LED chip that the simple solution of using series-parallel + purchasing a switching power supply on the market is not an optimal solution, and it cannot solve the problem of LED life. It is necessary to independently develop LED-specific digital power supply according to LED characteristics.

OTHERS

Influence Of Junction Temperature On Volt-ampere Characteristics Of LED Chips



- **LED FEATURE 3 :**

The LED chip is a negative temperature coefficient element, as shown in the figure: the same power supply voltage is 3.4V, and the chip current is 800mA and 500mA at 80 degrees and 30 degrees, respectively.

- **CONCLUSION:**

It can be seen that the volt-ampere characteristics of the LED chips change with temperature and the characteristics of the LED chips are inconsistent. The simple solution of using series -parallel + purchasing a switching power supply on the market cannot guarantee the consistency of the working current of the LED chips,so it cannot solve the life problem LED chips.In order to solve the problem of life expectancy, we must independently develop LED-specific digital power supply + series solution according to LED characteristics.

Contact Us

We are looking for distributors around the world...

THANK YOU

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Whatsapp : +86-188 1184 6202