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### **Plusrite**<sup>®</sup>

PLUSRITE ELECTRIC (CHINA) CO., LTD 27 Teng Long Road, Wujin District, Changzhou, Jiangsu, 213145 China www.plusrite.com info@pluslight.com



# TOWER LIGHTING

V8 =









### **Company Profile**

Plusrite Electric was founded in May 1986 in Changzhou, China, with the vision of becoming a recognized leader throughout the world in the distributing and manufacturing of high-quality lighting products. With our emphasis on continual innovation, excellence in manufacturing and customer driven service, today Plusrite Electric has grown into a global leader in the manufacturing and distribution of LED, HID, tungsten halogen, fiuorescent and other specialty lighting products. In addition to receiving the ISO 9001 Quality System certification, Plusrite Electric has received numerous awards for their outstanding products, innovative designs and international business enterprises.

With factories, distribution warehouses and sales offices located throughout Asia and North America, and expansion planned into South America and Europe, Plusrite Electric products are being manufactured to accommodate the rapidly expanding global marketplace. Currently there are more than 1000 different lighting products being sold in over 50 countries and regions throughout the world.

With the introduction of Plusrite Electric's signature brand, Plusrite, electrical wholesalers and lighting specialty companies throughout North America are turning to Plusrite Electric for a unique combination of reliable, low-cost, high-margin lighting products.

Product development is a high priority at Plusrite Electric. While striving to manufacture the best products possible, engineers and technicians are also working to expand the Plusrite product line. New products are continually being added to the lamp catalog.

As Plusrite brand is quickly becoming the brand of choice throughout the world, Plusrite Electric is proud to offier their mission statement to you, the customer: It is our mission to utilize teamwork and innovation to integrate the raw materials, global standard production techniques and the highest level of quality throughout our organization in order to provide every customer with the best products and service possible.

### Turning Light into Harmony...





### Temporary Lighting



Camping Lighting











# Temporary Lighting





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# **TG201-COB**





**Housing Material** Aluminum 6063

Lens Material Glass with extremely high light transmittance

**Optional Driver** Meanwell / Sosen

**Optional LED Chips** Citizen / Samsung COB Chips

Dimensions

Excellent heat dissipation, which ensure the fixture's lifetime.

Uniform illumination can comfort operators, which increase the efficiency

Special developed Lens with excellent narrow or wide light performace







Model	Wattage	Input	Frequency	Efficacy	Output	Output	CRI	Beam Angle		Dimension(mm)			Weight
	(W)	Voltage (V)	rrequeries	(Im/w)	(Im/fixture)	(Im /tower)		(°)	IF Degree	Length	Width	Height	(kgs)
TG201/160/2E/COB	160			150	24000	96000		459		410	291	190	6.7
TG201/350/4E/COB	350	100-277Vac	50/60Hz	150	52500	210000	70	45°	10.07	410	373	200	9.7
TG201/400/4E/COB	400	/48Vdc	(AC)	140	56000	224000	70	/60° IP6 /90°	IP67	410	373	200	9.7
TG201/500/4E/COB	500			130	65000	260000				410	523	200	11.0



Compact, firm and efficient design pass 3G vibration test

### Light Distribution

TG201/350/4E/COB QTY: 4pcs







Housing Material Aluminum 6063

**Lens Material** PC with extremely high light transmittance

**Optional Driver** Meanwell / Sosen

**Optional LED Chips** Lumileds / Bridgelux

Dimensions

Excellent heat dissipation, which ensure the fixture's lifetime.

Uniform illumination can comfort operators, which increase the efficiency.



### Specifications

Model	Wattage	Input	Frequency	Efficacy	Output	Output	CRI	Beam Angle		Dime	Weight		
Woder	(W)	Voltage (V)	riequeilcy	(Im/w)	(Im/fixture)		IP Degree	Length	Width	Height	(kgs)		
TG203/150/M1	150			150	22500	90000				386	243	140	6.3
TG203/250/M2	250	100-277Vac	50/0011	160	40000	160000		45°		386	329	140	8.5
TG203/350/M2L	350	/24Vdc	(AC)	150	52500	210000	70	/60°	IP67	386	405	140	9.7
TG203/400/M3	400	/48Vdc		155	62000	248000		/90°		386	449	140	10.5
TG203/500/M3L	500			145	72500	290000				386	500	140	12.0

Compact, firm and efficient design pass 3G vibration test.

Spcial developed Lens with excellent narrow or wide light performace.

### Light Distribution

TG203/350/M2L QTY: 4pcs



Housing Material
Aluminum 6063

Lens Material PC with extremely high light transmittance

**Optional Driver** Meanwell / Sosen

**Optional LED Chips** Lumileds / Bridgelux

Dimensions

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Excellent heat dissipation, which ensure the fixture's lifetime.

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Model	Wattage	Input	Frequency	Efficacy	Output	Output	CRI	Beam Angle		Dime	Weight		
Woder	(W)	Voltage (V)	Frequency	(Im/w) (Im/fixture) (Im /to		(Im /tower)	CRI	(°)	IF Degree	Length	Width	Height	(kgs)
TG203/350/M3T	350			160	56000	224000				366	415	140	11.0
TG203/400/M3T	400	100-277Vac /24Vdc /48Vdc	=0 (00) -	150	150 60000 240000 45°		366	415	140	11.5			
TG203/500/M4T	500		50/60Hz (AC)	160	80000	320000	70	/60°		366	534	140	15.5
TG203/600/M4T	600			150	90000	360000		/90°		366	534	140	16.0
TG203/700/M5T	700			145	101500	406000				366	654	140	17.0

Compact, firm and efficient design pass 3G vibration test.

Spcial developed Lens with excellent narrow or wide light performace.

### Light Distribution

TG203/350/T QTY: 4pcs





Housing Material	
Die-casting Aluminum 12	

Lens Material Glass with extremely high light transmittance

**Optional Driver** Meanwell / Sosen

**Optional LED Chips** Lumileds / Bridgelux

Excellent heat dissipation, which ensure the fixture's lifetime.



TG207/300/4E/COB QTY: 4pcs



Dimensions









Specifications

Model	Wattage	Input	Frequency	Efficacy	Output	Output	CDI	Beam Angle (°)	IP Degree	Dime	Weight		
Woder	(W)	Voltage (V)	riequeilty	(Im/w)	(Im/fixture)	(Im /tower)	Cita			Length	Width	Height	(kgs)
TG207/240	240	100-277Vac	50/60Hz (AC)	145	34800	139200	70	/60°	IP66	276	566	150	9.8
TG207/300	300	/24Vdc /48Vdc		135	40500	162000		/90°	IPOO	276	566	150	10.0

Compact, firm and efficient design pass 3G vibration test

Uniform illumination can comfort operators, which increase the efficiency

Special developed Lens with excellent narrow or wide light performace



Housing Material	
Die-casting Aluminum 12	

**Lens Material** Glass with extremely high light transmittance

**Optional Driver** Sosen

**Optional LED Chips** Lumileds / Bridgelux

Dimensions

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Compact, firm and efficient design pass 3G vibration test

Uniform illumination can comfort operators, which increase the efficiency



TG208/100 QTY: 4pcs





Model	Wattage	Input	Frequency	Efficacy	Output	Output	CRI	Beam Angle (°)	IP Degree	Dime	Weight		
Model	(W)	Voltage (V)	Frequency	(Im/w)	(Im/fixture)	(Im /tower)	CIU			Length	Width	Height	(kgs)
TG208/60	60	100-277Vac /24Vdc	50/60Hz (AC)	145	8700	34800	70	45° /60°	IP65	292	296	55	2.3
TG208/100	100			135	13500	54000		/90°		292	296	55	2.6





Excellent heat dissipation, which ensure the fixture's lifetime.

Special developed Lens with excellent narrow or wide light performace



# COB



SMD

### Key Features

Housing Material	Excelle
Aluminum 6063	which
<i>Lens Material</i>	Compa
PC or Glass with extremely high light transmittance	pass 3
<b>Optional Driver</b>	Unifor
Sosen	which
Optional LED Chips	Specia



Bridgelux SMD / Samsung / Citizen LED COB





QTY: 4pcs



# Specifications

Model	Wattage	Input	Frequency	Efficacy	Output	Output	CRI	Beam Angle	IP Degree	Dime	ension(r	Weight	
Model	(w)	Voltage (V)	riequeilcy	(Im/w)	(Im/fixture)	(Im /tower)		(°)	IP Degree	Length	Width	Height	(kgs)
TG209/60/1E/COB	60			150	9000	36000				290	210	120	2.8
TG209/100/1E/COB	100	100-277Vac		145	14500	58000				290	210	120	3.0
TG209/150/1E/COB	150		50/0011-	130	19500	78000		45°		290	270	120	4.0
TG209/60/M1/SMD	60	/24Vdc	50/60Hz (AC)	170	10200	40800	70	/60°	IP67	290	210	100	2.8
TG209/100/M1/SMD	100	/48Vdc	()	160	16000	64000		/90°		290	210	100	3.0
TG209/150/M1L/SMD	150			160	24000	96000				290	270	100	3.5
TG209/300/M2/SMD	300			160	48000	192000				340	240	116	7.0

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pact, firm and efficient design 3G vibration test

orm illumination can comfort operators, n increase the efficiency

Special developed Lens with excellent narrow or wide light performace

### Light Distribution

TG208/100





Sosen

**Optional LED Chips** Lumileds / Bridgelux

Housing Material Aluminum 6063
Lens Material Glass with extremely high light transmittance
Optional Driver

Dimensions





### Specifications

Model	Wattage	Input	Frequency	Efficacy	Output	Output	CRI	Beam Angle (°)	IP Degree	Dime	ension(r	Weight	
	(W)	Voltage (V)	riequeilty	(Im/w)	(Im/fixture)	(Im /tower)	CIU		IF Degree	Length	Width	Height	(kgs)
TG211/240	240	100-277Vac /24Vdc	50/60Hz	145	34800	139200	70	30°	IP67	425	371	123	10.5
TG211/320	320	/48Vdc	(AC)	145	46400	185600	70	/60° /90°	1207	425	371	123	10.5

Excellent heat dissipation, which ensure the fixture's lifetime.

Compact, firm and efficient design pass 3G vibration test

Uniform illumination can comfort operators, which increase the efficiency

Special developed Lens with excellent narrow or wide light performace

### Light Distribution

TG211/320 QTY: 4pcs



Housing Material Die-casting Aluminum 12

Lens Material PC with extremely high light transmittance

**Optional Driver** 1

Lumileds / Bridgelux

**Optional LED Chips** 

Dimensions

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Special developed Lens with excellent narrow or wide light performace





### Specifications

Model	Wattage Input	Freduency	Efficacy	ficacy Output			Beam Angle	IP Dogroo	Dime	ension(r	nm)	Weight	
Woder	(W)	Voltage (V)	riequeilty	(Im/w)	(Im/fixture)	(Im /tower)	Chi	(°)	IF Degree	Length	Width	Height	(kgs)
TG212/50	50	100-240Vac /12Vdc /24Vdc	50/60Hz (AC)	140	7000	28000	70	30° /60° /90°	IP67	220	216	76	2.5

Excellent heat dissipation, which ensure the fixture's lifetime.

Compact, firm and efficient design pass 3G vibration test

Uniform illumination can comfort operators, which increase the efficiency

### Light Distribution

TG212/50 QTY: 4pcs





Housing Material Die-casting Aluminum 12

Lens Material PC with extremely high light transmittance

**Optional Driver** Moso / Sosen

**Optional LED Chips** Lumileds / Bridgelux

Excellent heat dissipation, which ensure the fixture's lifetime.

Uniform illumination can comfort operators, which increase the efficiency

























### Specifications

Model	Wattage	Input	Frequency	Efficacy	Output	Output	CRI	Beam Angle	IP Degree	Dime	ension(r	nm)	Weight
woder	(W)	Voltage (V)	Frequency	(Im/w)	(Im/fixture)	(Im /tower)	CNI	(°)	IP Degree	Length	Width	Height	(kgs)
GK503/150	150	100-277Vac			21000-24000	84000-96000		60°		359	392	110	6.6
GK503/200	200	/24Vdc	50/60Hz (AC)	140-160	28000-32000	112000-128000	70	/90°	IP65	430	460	110	7.9
GK503/250	250	/48Vdc			35000-40000	140000-160000		/120°		430	460	110	8.4

Compact, firm and efficient design pass 3G vibration test

Special developed Lens with excellent narrow or wide light performace





**Optional Driver** Meanwell / Sosen

**Optional LED Chips** Lumileds / Cree Excellent heat dissipation, which ensure the fixture's lifetime.

Compact, firm and efficient design pass 3G vibration test

Uniform illumination can comfort operators, which increase the efficiency

Special developed Lens with excellent narrow or wide light performace











Specifications

Model	Wattage	Input	Frequency	Efficacy	Output	Output	CDI	Beam Angle		Dimension(r	nm)	Weight
Wouer	(W)	Voltage (V)		(Im/w)	(Im/fixture)	e) (Im /tower)	Chi	(°)	IF Degree	Diameter	Height	(kgs)
BLD480	480	120Vac /230Vac	F0/C0U-	140	67200	134400	70	260%	IP33	φ1000	800	10.5
BLD600	600	/48Vdc		135	81000	162000	70	360°	1233	φ1000	800	10.5

# PLS-WK25W-6K



### Key Features

Housing Material Flame-retardant ABS

Charging Time 7.5H(DC) / 24H(Sloar)

**Duration Time** 2-14H

Three dimming levels, six light options.

Multi-purpose LED light for outdoor camping, gardening, working, portable lighting etc..



### Specifications

Model	Wattage		Battery Capacity(mAh)		Luminous Flux		CRI	RI Beam Angle	IP Degree		ension(r	nm)	Weight
WOUCI	(W)	Voltage (V)	Single light	Whole light	Single light	Whole light	Chi	(°)	IF Degree	Length	Width	Height	(kgs)
WKL25	25	Solar/ 240Vac/ 12Vdc	5000	15000	1150	3450	80	/	IP44	940	1080	2100	7.0

Durable and adjustabletripod, height fron 1m to 2m.

All sigle lights are available to operate individually. Each light can be connected as module light by connectors.





- Ceiling Mount -

(ATTTT

- Pendant -

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Specifications

Model	Wattage	Input	Frequency	Efficacy	Output	CRI	Beam Angle	IP Degree	Dimension(r	nm)	Weight	
woder	(W)	Voltage (V)	Frequency	(lm/w) (lm/fixture)		(°)	IP Degree	Diameter	Height	(kgs)		
EPL6801	20-100	– 100-277Vac	100-277Vac	50/60Hz	120-130	2400-13000	70	60°	IP66	260	250	7.25
EPL6802	120-160		30/00112	120-130	14400-20800	- 70	/90°	11 00	300	250	8.6	

### **Key Features**

- Excellent heat dissipation, which ensure the fixture's lifetime.
- Compact, firm and efficient design pass 3G vibration test
- Uniform illumination can comfort operators, which increase the efficiency
- Special developed Lens with excellent narrow or wide light performace

### Dimensions







Housing Material Aluminum Alloy

Lens Material Glass with extremely high light transmittance

Fasteners Material Stainless Steel Excellent heat dissipation, which ensure the fixture's lifetime.

pass

Uniform illumination can comfort operators, which increase the efficiency

Dimensions





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Specifications

Model	Light	Base	Input	Working			Net Size(mm)			Weight
wouer	Source	Туре	Voltage	Temperature	А	В	С	D	E	(kgs)
TG1000	MH1000W									
TG1000	MH1100W	E39/ E40	120-277V	-30°C - 50°C	640	535	460	515	275	7.5
TG1000	MH1250W									

Compact, firm and efficient design pass 3G vibration test

Special developed Lens with excellent narrow or wide light performace









Housing Material Die-casting Aluminum 12

Lens Material Glass with extremely high light transmittance Excellent heat dissipation, which ensure the fixture's lifetime.











### Specifications

Model	Light	Base	Input	Working		Dimension(mm)		Weight
WIDUEI	Source	Туре	Voltage	Temperature	Length	Width	Height	(kgs)
FG13611	MH1000W-T	520/540	100 2771/	2000 5000	455	255	225	7.0
FG13611	HPS1000W-T	E39/ E40	120-277V	-30°C - 50°C	455	355	335	7.0

Compact, firm and efficient design pass 3G vibration test

Uniform illumination can comfort operators, which increase the efficiency

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# Metal Halide Lamps



### Key Features

Stable Performance Arc Tube Design

Superior Quality High Quality International Raw Material Using

High Efficacy Superior to Most Traditional Light Source and Meet with Various Lighting Demands



### Specifications

Model	Wattage (W)	Base Type	Bulb	Сар	Output (Im/lamp)	ССТ(К)	CRI	Lifetime(H)	Matching Ballast
MH400/T46	400		T46	60HZ 24uF (400V/ 540V)	32000	4200	70	15000	BAMH400-CWA/V120
MH400/BT37	400	E39	BT37	50HZ 26uF (400V/ 540V)	36000	4200	65	20000	BAMH400-CWA/V230EU
MH1000/TT64	1000	L39	TT64	60HZ 24uF (480V/ 540V)	85000	4200	65	15000	BAMH1000-CWA/V120
MH1000/BT37	1000		BT37	50HZ 30uF (480V/ 540V)	110000	4200	65	10000	BAMH1000-CWA/V230EU

### Creat CRI Latest Halide Pill System Using

Better Performance and Brighter High Efficacy Universal Burning Position

*Longer Life* Stable Output and Good Maintenance



# **High Pressure Sodium Lamps**



Stable Performance Arc Tube Design

Superior Quality High Quality International Raw Material Using

High Efficacy Superior to Most Traditional Light Source and Meet with Various Lighting Demands



### Specifications

Model	Wattage (W)	Base Type	Bulb	Сар	Output (Im/lamp)	ССТ(К)	Lifetime(H)	Matching Ballast
HPS1000/ET25	1000	E39	ET25	60HZ 26uF (525V/ 540V)	124000	2000	24000	BALU1000-CWA/V120
HPS1000/BT37	1000	E39	BT37	50HZ 32uF ( 540V)	115000	2000	20000	BALU1000-CWA/V230EU

### Creat CRI Latest Halide Pill System Using

Better Performance and Brighter High Efficacy Universal Burning Position

Longer Life Stable Output and Good Maintenance









Special Metal Halide Lamp Ballast

Built-in Installation

### Longer Life

Using High Insulation Resistance Material to Make Ballast

Which Perfectlt Matching with Plusrite Metal Halide Lamp



# Specifications

Model	Voltage (V) Frequency		Сар		Dimension(mm)	)	Weight	Installation
Woder		(HZ)	Cap	Length	Width	Height	(kgs)	Dimensions(mm)
BAMH400-CWA/V120	120	60	24uf-400/540V	132	135	135	4.9	115*85
BAMH1000-CWA/V120	120	60	24uf-480/540V	197	117	111	8.6	171*42
BAMH400-CWA/V230EU	230	50	26uf-400/540V	132	135	135	4.9	115*85
BAMH1000-CWA/V230EU	230	50	30uf-480/540V	197	117	111	8.6	171*42
BAMH400-CWA/V240	240	60	24uf-400/540V	132	135	135	4.9	115*85
BAMH1000-CWA/V240	240	60	24uf-480/540V	197	117	111	8.6	171*42

High-grade Copper Wire and Silicon Steel Sheet

Standard MH Ballast with Screw and Fixed Terminal Blocks



# **Electrical Box-X1**

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Model	Light	Voltage (V)	Frequency		Net Siz	e(mm)		Weight
Woder	Source	voltage (v)	(HZ)	A	В	С	D	(kgs)
BAMH1000-CWA/V120		120	60					
BAMH1000-CWA/V230EU	MH1000W	230	50	179	167	340	370	12.5
BAMH1000-CWA/V240		240	60					

- and Good Seismic Performance
- High-temperature Silicone Rubber Sealing Ring with Excellent Waterproof Performance



# **Electrical Box-X2**







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Model	Light	Voltage (V)	Frequency		Net Siz	e(mm)		Weight
Model	Source	voitage (v)	(HZ)	A	В	С	D	(kgs)
BAMH1000-CWA/V120x2		120	60					
BAMH1000-CWA/V230EUx2	MH1000Wx2	230	50	165	138	439	510	12.9
BAMH1000-CWA/V240x2		240	60					



### Key Features

- Precision Sheet Metal Processing with Electrostatic Sprayed Treatment
- Concise Appearance, Firm Structure and Good Seismic Performance
- Good Heat Dissipation with Excellent Waterproof Performance

### Dimensions









Easily Bent, Excellent Toughness





### Specifications

Model	Insulating Material	Insulating Color	Sheath Material	Sheath Dimesion(mm)	Spiral Length(mm)	Spiral Diameter(mm)	Total Length (m)	Working Length of Screw Part (m)
9*16AWG	PVC	Separation	Polyurethane	11.5±0.3	1000±10	50±2	12.0	5-6
9*16AWG	PVC		Polyurethane	11.5±0.3	1550±10	50±2	17.5	8-9
9*16AWG	UL insulating Material		UL elastic Material	14.5±0.3	950±10	60±2	12.0	5-6
9*16AWG	UL insulating Material		UL elastic Material	14.5±0.3	1100±10	60±2	17.5	8-9

### Key Features

Nice Appearance

Good Shrinking and Elasticity

### **Safety Instructions**

# Check the lamp carefully before installation.

- Should the lamp fall of or loose or break, the product is prohibited to use.
- 2. Once the lamp tube bubbled or cracked, the product is prohibited to use.
- **3.** Should the inside lamp fixing bracket fall off or loose or break, the product is prohibited to use.
- Should the auxiliary starter of inside light bulb deform, fracture, too close to the two poles, the product cannot be used.
  Should the lamp holder loose, the soldering crack contact point oxide, the product is prohibited to use.

damage to the lamp holder or glass shell.

If the lamp tube with the fixed bracket

should release the bracket or loose the

spring first, Then fix the bulb after

3. When install the double-ended metal

halide lamp should hold the 2 ceramic

lamp holder ends, then locate the one

holder, push it into inside it slowly, make

sure the another end of the lamp head

can fix to the lamp holder, loosen your

end of the light source to the lamp

installation.



### The bulb installation.

- To avoid the hand besmirch, perspiration and other pollution to the light bulb and to avoid the damage to the bulb and light fixture caused by pollution under the high lit temperature. the electrician should worn gloves when installation.
- 2. When installing the single-ended metal halide lamp, the electrician should hold its glass shell by one hand, and hold the lamp holder by another hand, and then fix the bulb on the lamp holder slowly, Must not using excessive force to prevent

hand after fixing the lamp source, make sure the lamp source be installed in good contact.

- 4. As to the double ends light tube which have no outside glass shell, don't touch it when it is working. Please hold up the lamp holder when take off the light tube.
- When install the light source, must ensure the light source without rith the reflector or glass, Should keep some distances from them, otherwise it is belong to wrong installation.

### Lighting

- If no special instructions for thesingle-ended metal halide lamp, can be ignited at any position. Double end lamp'signition point position should the horizontal plus or minus 5°.
- 2. When testing, light should be stipulated in the corresponding products position. Horizontal lighting. The electricarc tube exhaust tips should be upward.
- Ballast, ignitor, capacitor and so on should be correct matching, wiring methods are confirmed right before lighting. To prevent ultraviolet radiation to the human eye or skin damage, we must cover the light fixture 's glass first before igniting the double end metal halide light whose lamp have no glass shell.
- 4. Please make sure the power supply and frequency is in the rated scope before igniting. If not, please adjust them to the right rated scope or burn caused by high temperature shell explosion.
- When the light source burning should avoid touching it, otherwise, it will leads to loosen bulb or bulb cracking or scratches or burn caused by high temperature shell explosion.
- 6. Don't touch the light source at any time to prevent to get an electric shock. If the lamp is not working. You should isolate the power immediately to check the circuit or lamp source.
- 7. To prevent halide consolidation at both ends the igniting test time must be more than 10 minutes so that ensure full boil the halide in the tank: if the arc discharge lamp hasnt fully set up, then turn off the lights. The twoe lectrode of the lamp arc tube will be black, and these will cause difficult start lighting. Lighting cannot be started again, Please choose the right ignitor to start auxiliarilly, after waiting for lights normal stable burning out, this black phenomenon will disappear.
- The light cycle will affect the lamp lifetime. Shorter light cycle shorter lamp lifetime If the light cycle time is less than 10 hours, the lifetime as follows: the light cycle interval is 5 hours the lifetime is 75% of rated lifetime, the light cycle interval is 2. Shours, the lifetime is 55% of rated lifetime; the light cycle mterval is 1.25 hours, the lifetime is 40% of rated lifetime.
- **9.** Don't touch the light source directly after just now isolate the power. Waiting to the light source fully cool down to take off

or replace it.

- 10. Do not ignite the light source again before it is completely cool down. If the lamp source is damaged or not working in the ignitor 's circuit you should isolate the power immediately, no circuit working without load.
- 11. Don't touch the light source directly after just turning it off, don't put the heating light tube on the cool place, don'tput the heating light tube on the combustible and explosive goods.
- 12. Metal halide lamp maximum flux takes about 10 minutes, after 10 minutes to reach a steady state, do not switch it frequently, otherwise it will affect life span.
- **13.** Metal halide lamp for high-intensity gas discharge lamp, if the glass of light fixture is broken, replacing the glass you should cut off the power supply immediately.
- 14. The metal halide light tube light up again should after it must be sufficient cooling Different power light tube, the cooling time is diferente, the time is from 5 to 15 minutes. The ballast wil completely control the process automatically, during the time, To avoid damage to lamp life please do not repeat open the ballast.
- 15. Lamp restart: when metal halide lamp is working the atmospheric pressure will be higher in the lamp if you don't have a special device, then it could not immediately trigger light up again after it is turned off, because the air pressure will hinder the electronic conduction at this time. Steam in the lamp will cool down only if there's delay of a certain time, so it can make lamp work again n in the situation of original breakdown voltage. This certain time is decided by the difference of power and the starting mode of halogen lamp. It's particularly easy to make the auxiliary electrode materials and the main electrical pole sputtering if the lamp is lighted when it doesn't cool completely. And such sputtering materials will be deposited on the walls of tubes leading to reduce of light brightness or damage of electrode, which will lead to the occurrence that lamps cannot be started easily or even ever.

# **HID Lamp Common Faults Guidelines**

Common faults	Light cannot work				
Possible reasons					
Bulbs and lamp holder poor contact	Specific performance and corrective actions. Tighten the bulb to the lamp holder, not use too much force, otherwise it will damage the light bulb or lamp holder. If the lamp holder deformation or burning or lamp not tightened correctly inside the lamp holder, replace the new lamp holder, lamp after screwing in lamp holder, tighten or loose are all not bright, maybe the inside lamp holder spring lost flexibility and lead to poor contact or not contact; Unscrew the lamp holder it is bright, but tighten the l amp holder it is not bright, it is maybe caused by the lamp holder attenuation of the high pressure which is produced by the electronic ignitor.				
Lamp is damaged	Lam normal life is ended. With the using time increasing, the electrode attenuation to some degree then caused it cannot launch electrodes; Or due to residual trace impurities continuously emit harmful gas discharge and make the light start voltage rise and then make the lamp cannot start; Outside glass shell breakage or chronic leak. Characterized by broken outside glass shell or the lamp inside bracket change blond and black due to oxidation; Discharge tube poor sealed and leaked; Bulb inside connection parts disordering Open circuit or short circuit caused by lamp holder loose.				
Lamp cooling is not sufficient	Metal halide lamp light immediately start will be filed if it is not fully cooling after the power is just cutting off in normal circumstances。 Lamp should be cooling after 10 to 15 minutes to start again.				
Incorrect wiring	The wiring connection is not according to the stipulations. Incorrect wiring connection will caused light not bright or light flashes once, even seriously performance is the discharge light tube burst or lights launch a dazzling glare in an instant; The cable's high potential intensity is not enough; the insulating layer is damaged, caused the electronic ignitor generated high pulse attenuation or short-circuited. The connecting cable length from the ballast or electronic wiring of the trigger to the lamp holder is too long, caused starting pressure loss is big, and the trigger voltage is not enough, the lamp does not start .Suggest wiring length no more than 10 meters or within the effective length specified by the electronic ignitor.				
Ballast in fault	Ballast in open circuit: if the ballast has valid input voltage and without output voltage, it is indicated that the ballast has burned or may be the terminal of screws loose or poor contact. Ballast in short circuit: ballast in short circuit (generally has the burning phenomenon), discharge tube often occurs cracking phenomenon in the sealing part; Error configuration of the ballast check the ballast power, voltage, and installation if correct match with the light.				
Electronic ignitor in fault	Common fault is the electronic ignitor damaged, replace the new ignitor.				
Electronic ignitor mismatched with the light.	Electronic ignitor mismatched with the light, Electronic trigger output pulse amplitude is low, cannot meet the requirement of the lamp starter, and replace the ignitor.				
Fuse is broken	The fuse burn out, the light circuit will be in the open circuit. Inspect and replace a new fuse.				
Too low power supply voltage	Check the circuit power supply voltage and ballast output votage. (with no prior to disconnect electronic tiggers may not test the ballast output voltage otherwise it may damage the test instrument)				
Common faults	Light cannot work				
mismatched ballast	Check if the ballast specification match with the lamp.if not match .replace the matched ballast.				
Electronic ignition starter mismatched.	Electronic starter ouput energy is not enough. Such as the pulse peak voltage is not enough: Pulse width is not enough; Or pulse voltage phase does not meet the requirements.				
Common faults	Light cannot work				
Lamp normal life is ended	With the light using time increasing, emitting material in discharge tube reducing and the impurity gas increasing will cause the lamp voltage rise, then lead the light self turn off.				
The start up voltage of ignitor is too slow.	In inductive ballast lighting systems, when the electronic ignitor start up voltage is too low but still make the light bright and the electronic ignitor is still in work, that easy to cause the lamp self turn off.				
Mismatched Ballast.	In CWA ballast lighting system, the ballast performance does not meet the requirements, or the special capacitor capacity big attenuation (2uF) will cause the light self tum off.				
The power supply vltage is too slow	The lamp can't normal start or start glowing arc can't keep work.				
The lamp pooR contact with the lamp holder	Tighten the bulb to the lamp holder, not use too much force, othenwise it will damage the light bulbor lamp holder. If the lamp holder deformation or burning, or lamp not tightened correctly inside the lamp holder, replace the new lamp holder, lamp after screwing in lamp holder, tighten or loose are all not bright, maybe the inside lamp holder spring lost flexibility and lead to poor contact or not contact.				

	Possible reasons	Specific performance and corrective ac Check and orrect the circuit. Check the ignition of the light tube is in the righ the ignition will cause the lamp life short.				
	Wrong wiring circuit					
	Lamp ignitbon in wrong way					
	Mismatched ballast	Small power bulbs used in high power ballast w of low ballast resistance. even seriously appear				
	Poor quality ballast	Use the qualified ballast to comply with the per				
	The power supply voltage is too high	If the power supply voltage is too high for a long too high under overload power.				
	Frequent switch of the light	High frequency switch of the light will cause the fast and shortens lamp life.				
	Unscientific light design	Bad heat dissipation will cause the lamp overloa				
	Mismatched ignitor	Make the light start time too long then shorten				
	Common faults	Light cannot work				
	Possible reasons	Specific performance and corrective ac				
	Ballast resistanca is too big, makes the lamp power insufficient	Replace the ballasts.				
	Power supply voltage is too low, caused the light power insufficient.	Check the ballast power supply voltage when th				
	The light fixture or lamp has beenseriously polluted.	Check and clean the light, regular maintenance				
_						
	Common faults	Light cannot work				
	Possible reasons	Specific performance and corrective ad				
	Mismatched ballast	Check the ballast model; make sure to use the r				
	Overvoltage work	Lightwork in over power status, power supply v				
	Discharge tube is overheating	Check lighting fixture and lamp installatian envi				
	Common faults	Light cannot work				
	Possible reasons	Specific performance and corrective ad				
	Power supply voltage fluctuation	The light quantity should be the same in differe The different phase line voltage deviation shoul The amount of light should not be more than ei				
	Ignition pattern differences	Different lamp lights direction will cause the lan should be in the same direction.				
	Ballast resistance differences	Use suitable ballast, suggest the same places us				
	100 hr photoelectric parameters stable process	One of the characteristics of high-strength gas of				
	Light itself in flaw design	Optimize the light design.				

Light cannot work

If the color is important consideration, s
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Different batches or same batch but the ignition time with different light color temperalure will vary, suggest th same sites to use the same batch light and ignition in same time.

The light fixture or lamp has been seriously polluted

Mixture of different

Lamp ignition time differences

specifications of the lamp

Different manufacturer

**Common faults** 

Check and clean the light maintain it regularly.

If the input voltage is too big, but the ballast voltage is small, that will caused the light self turn off.

Mismatched ballast

t directon, and the lamp installation in the right direction, If not,

hich makes the lamp power too big and shorten the lamp ife because discharge tube deformation phenomenon.

ormance requirements.

g time, it will shorten the lamp life because of its long work votage is

light tube electrode sputtering, which leads to the lamp voltage too

ded power

he lamp life, High pulse voltage also easy to damage the lamp .

he light is working.

ight mode ballast.

voltage is high, reduce the power supply voltage.

onment, make sure the lamp working temperature is not too high.

nt phase In the installation design requirements. d be limited, cannot be too large ght under one switch control.

mp burning color different; suggest the same places lamp ignition

ng the same brand ballast.

lischarge lamp. not belong to the fault

ggest the same occasion to use the same specications' light.

The same type of lamp produced by diferent manufacturers. The color temperature will be different because the design and manufacturing process will be different, suggest the same places use the same manufacturer's light fixture.