

Continued attention to people in high-risk operations
To provide cutting edge signal, lighting, control products
and solutions worldwide

PORTS APPLICATION PRODUCT CATALOG



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ABOUT NANHUA

Nanhua electronics Co.,Ltd. was established in 1990 focusing on research and development of the industrial products for harsh industrial application, concerning people working under high risk condition like ports, mines, metallurgical plants, wind power, tall buildings, vessels ,etc. Our engineers frequently visit the application sites in order to research and develop the most reliable industrial signal, lighting and control products.

Nanhua keeps rigorous products R&D and quality control, certified by ISO9001:2015 quality management system. We award more than 77 patents, 135 FAA, ICAO, SABS, CAAC test reports and UL&cUL, SAA, CE certificates issued by world famous third-party laboratory, authoritative and approval.

Nanhua designs and manufactures industrial LED lighting fixtures available for a wide variety of applications, including high vibration, corrosion, hazardous locations, and marine environments. Nanhua LED lighting fixtures had been installed on container cranes worldwide and we are ideally committed to improve crane performance and reduce maintenance costs.

Today, NANHUA products and solutions have been successfully applied to the global ports, mining sites, airports, wind power and other industries. Our company has become an execution standard in part of industrial fields and our products are regarded as a high-performance solution. We will continue to insist the concept of reliable and safe research, to keep exploring the latest technology and to develop new products to help customers solve problems and realize the improvement of customer value.

Certification



CE certification



UL certification



SAA certification



BIS certification



Patents



Patents



ISO9001



Explosion-proof system



ISO14001



OHSAS18001



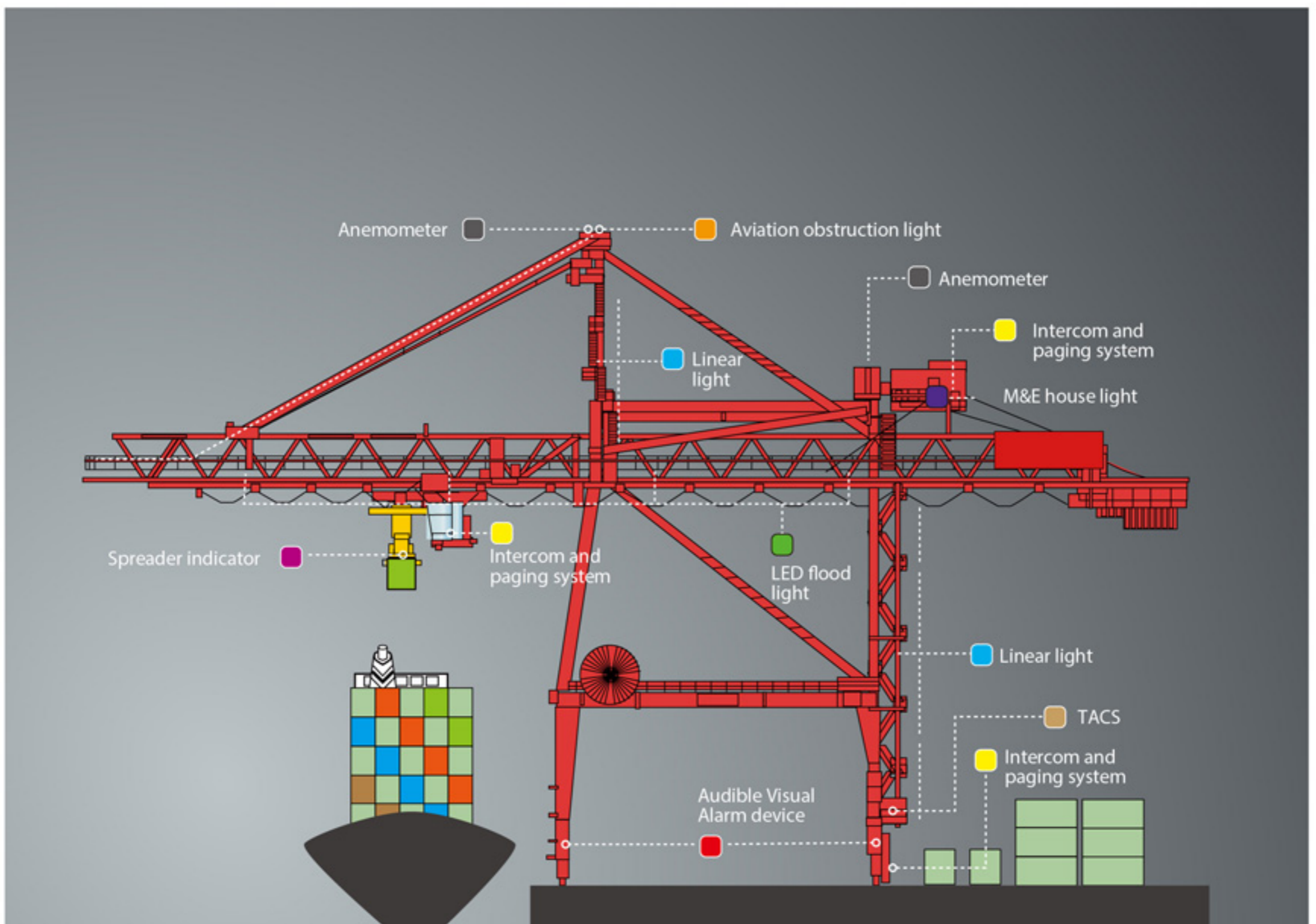
LS810 ICAO



LM403 ICAO

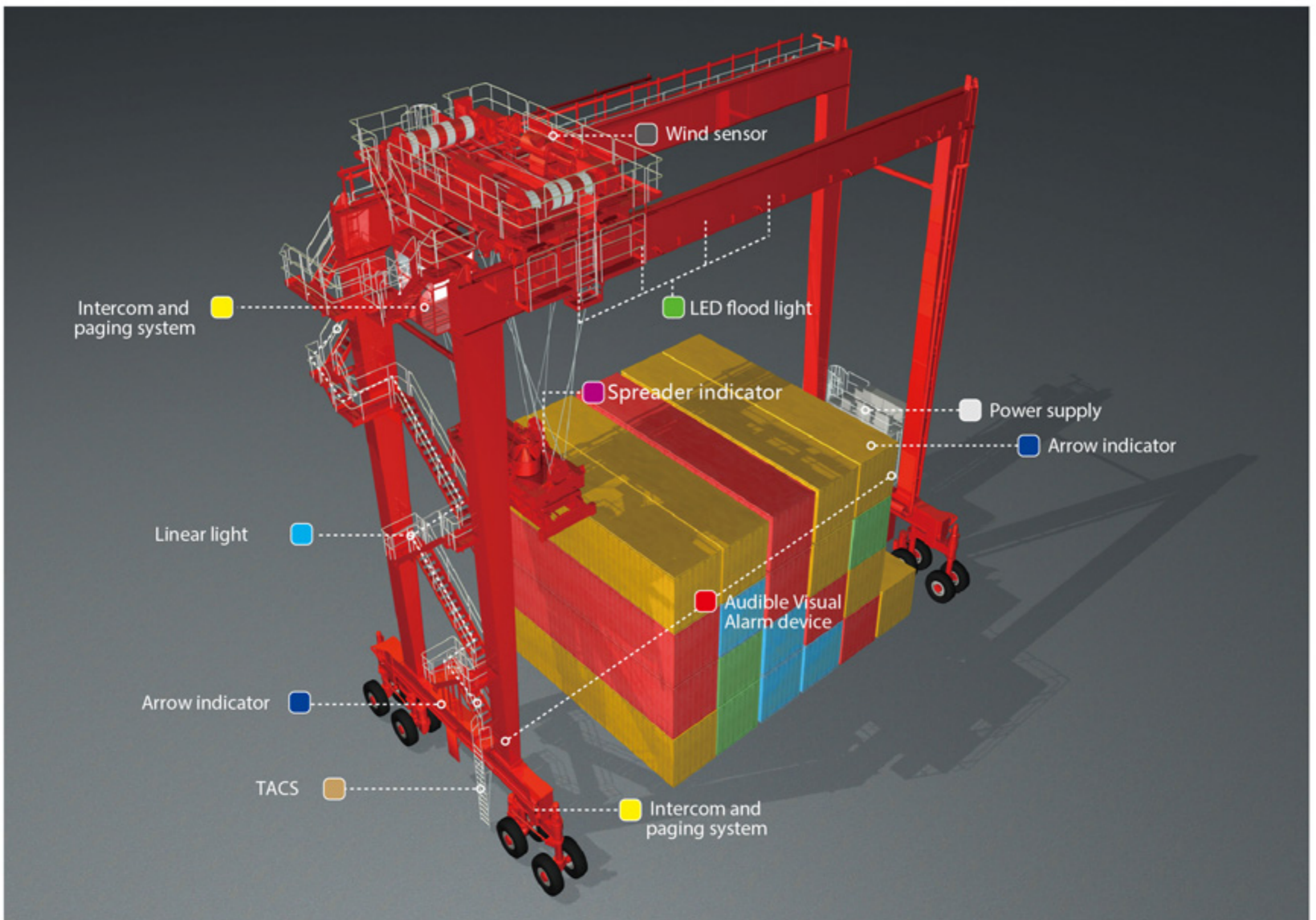
STS Crane Solution

- Anemometer:** FAR Ultrasonic wind sensor
- Aviation obstruction light:**
 LS810 Low intensity aviation obstruction light
 LM403 Medium intensity aviation obstruction light
- Paging intercom system:** DT80 series paging intercom system
- LED flood light:** LF30/LF46S/LF46/LF70ES series LED flood light
- M & E house LED linear light:** LW456/LW34/LW34L LED linear light
- LED linear light:** LW46/LW46E LED linear light
- Audible visual alarm:** BC-8 Audible visual alarm
- Arrow Panel Display:** ABC-18 Arrow panel display
- Spreader indicator:** ABC-16 Spreader indicator
- Power supply:** ZD204 Power Charging cabinet
- TACS:**FS series terminal access control system



RTG Crane Solution

- Wind sensor: FA13 series Wind sensor
- Aviation obstruction light:
LS810 Low intensity aviation obstruction light
- Paging intercom system:
DT80 series paging intercom system
- LED flood light: LF30/LW16S series LED flood light
- LED linear light: LW46/LW46E LED linear light
- Audible visual alarm: BC-8 Audible visual alarm
- Arrow Panel Display: ABC-401 Arrow panel display
- Spreader indicator: ABC-16 Spreader indicator
- Power supply: ZD204 Power Charging cabinet
- TACS:FS series terminal access control system



LIGHTING



LED Flood Light LF30



Products description and application

LF30 series high power LED flood lights use high grade international brand LED light source and drivers, providing stable and durable lighting for Port, Mine site, Offshore, etc very harsh outdoor applications.

Standard: IEC60598-1/IEC60068-2/IEC60529/IEC62262/UL1598/EN55015.

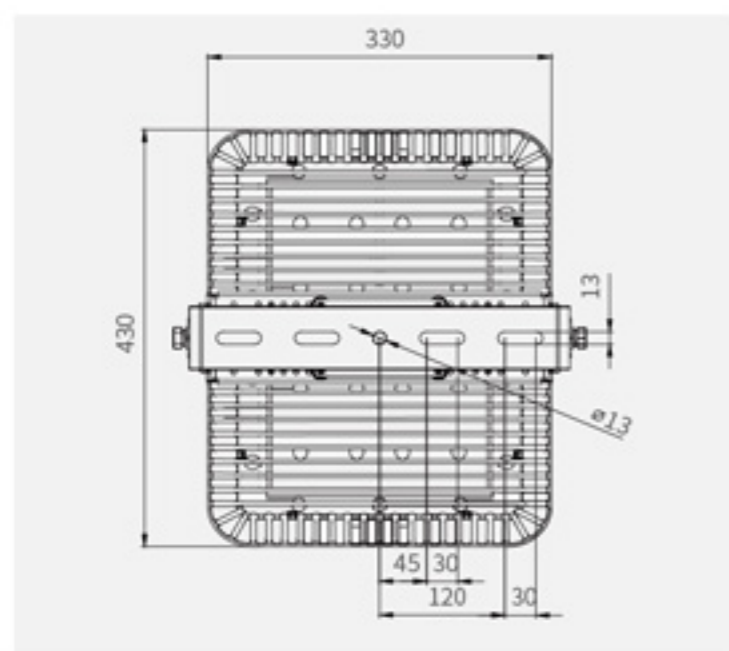
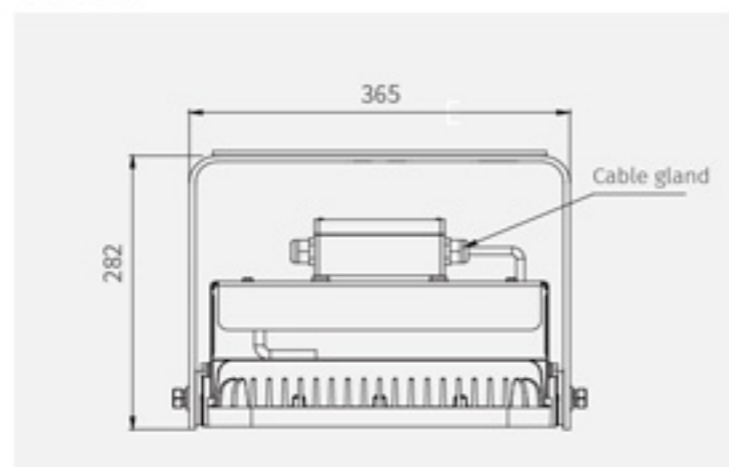
Certification: UL&cUL / CE(TUV).

Features

- Integrated die cast body, superb mechanical strength achieve 5G vibration resistant capacity.
- Professional fin type heat dissipation design, guarantee LEDs life span.
- 2 degree tilt angle structure design, prevent water and dust accumulation.
- Module design balance the temperature and pressure interior and exterior of the product, protect LEDs devices.
- International brand LED light source and drivers guarantee product stability and durability.
- Tempered glass cover with IK08 rate.
- PWM/0-5V/0-10V/time control, dimming control is available for option.

Mounting dimension

unit: mm



Specification

Rated voltage	AC100V-AC240V/AC480V	LEDs life time	≥50000h
Frequency	50Hz-60Hz	Color temperature	Cold white: 5500K-6000K
Rated power consumption	250W 200W		Warm white: 2700K-3000K
	150W 100W	Lumens per Watt	Cold white: ≥135 lm/w
Power factor	>0.9		Warm white: ≥130 lm/w
EMC	GB/T 17626.5-2008	CRI	Cold white: Ra≥70
	GB/T 17626.2-2008		Warm white: Ra≥80
	GB/T 17626.4-2008	Body material	Aluminum alloy
Lightning surge	GB/T 17626.5-2008	Cover material	Tempered glass
Electrostatic discharge	GB/T 17626.2-2008	Safety wire material	Stainless steel
Vibration-resistant level	IEC60068 5G	Operating temperature	Ta -30°C-60°C
IK rate	IEC62262 IK08		(overheat protection)
Salt spray rate	ISO9227 720H	IP rate	IEC60529 IP65
Beam angle	15°/25°/60° (optional)	Body color	Silver
		Weight	13 kg

LED Flood Light LF46S

Products description and application

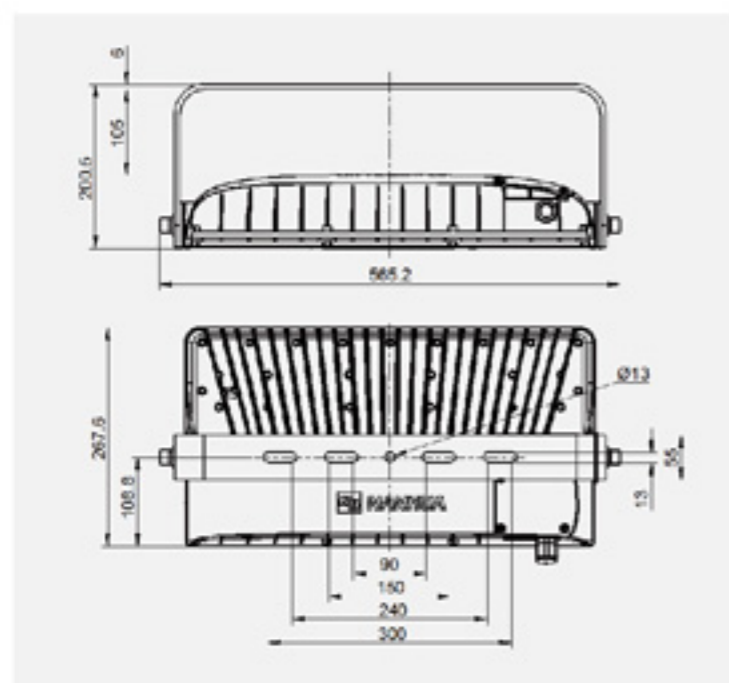
LF46S series LED flood light, it can aim in any direction, and has a structure that is not affected by weather conditions. Provide energy-saving and low-maintenance lighting solutions, with a variety of optical lenses, to provide a stable and comfortable lighting effect for the lighting area, so that the staff can focus more on work safety and work efficiency. It is mainly used for industrial lighting in ports, wharfs, large-area operations mines, airports, stadiums and other places.

Features

- Highly reliable, efficient LED light source, long life, energy saving and environmental protection.
- Integrated design of fin-type lamp housing, strong integrity, sufficient heat dissipation, light weight and good shock resistance.
- Special spraying process, oxidation resistance, corrosion resistance, fully sealed structure, suitable for high salinity coastal areas.
- The back angle structure design prevents water and dust accumulation.
- Equipped with a waterproof and breathable valve to balance the temperature and pressure inside and outside the cavity to protect the LED light source device.
- The product has multiple color temperature options, good color rendering, anti-glare and good visual effect.
- PC lampshade, with ultra-high light transmittance.
- The vertical angle of the mounting bracket is

Mounting dimension

unit: mm



Specification

Voltage	120V-277VAC	LEDs life span	≥60000h
Power	100W 150W 200W	Beam angle	15°/25°/ 60°
Frequency	50Hz/60Hz	Colour	Silver
PF	>0.9	Housing	Aluminum alloy
EMC	IEC61000-4-2	Lens	PC
	IEC61000-4-4	Surface treatment	Polyester coating
	IEC61000-4-5	Weight	8kg (100W, 150W, 200W)
	IEC61000-4-6	Installation	U bracket
	EN55015 CLASS C	working temperature	-40°C ~ +50°C (Overtemperature protection)
Dimming	0-10V (Optional)	Working humidity	0-100% RH
Wiring	Waterproof gland/lead wire	Anti-vibration	IEC60068-2-6 5g
Light source	LED	IP rate	IEC60529 IP67
Color temperature	5700K 4000K 2700K	IK rate	IEC62262 IK08
CRI	Ra≥70 Ra≥70 Ra≥80	Salt spray grade	ISO9227 720h
Light effect	≥140 lm/w ≥130 lm/w ≥130 lm/w		

LED Flood Light LF46



Products description and application

LF46 series high power LED flood lights use high grade international brand LED light source and drivers, providing stable and durable lighting for Port, Mine site, Offshore, etc very harsh outdoor applications.

Standard: IEC60598-1/IEC60068-2/IEC60529/IEC62262/EN55015

Certification: UL&cUL / CE

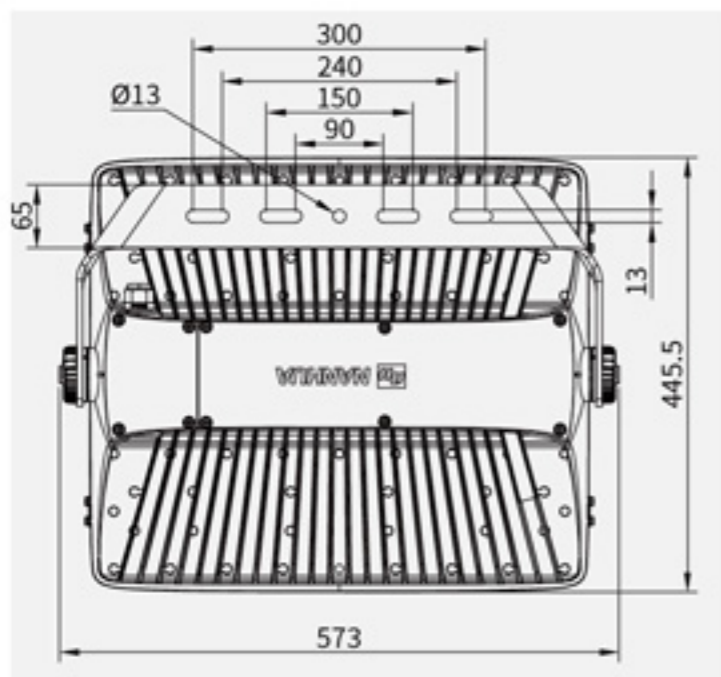
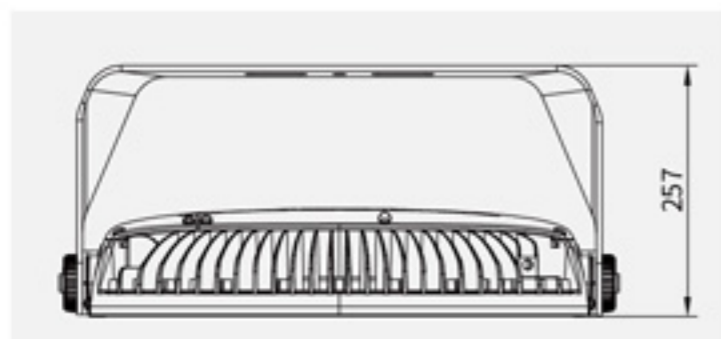
Features

- Multiple optical light distribution is optional, meeting different lighting requirements
- Configuration equipped with safety wire and damping pad.
- 5G vibration resistant capacity.
- Professional fin type heat dissipation design, guarantee LEDs life span.
- 2 degree tilt angle structure design, prevent water and dust accumulation.
- International brand LED light source and drivers guarantee product stability and durability.
- Tempered glass cover with IK08 rate.
- PWM/0-5V/0-10V/time control, dimming control is available for option.



Mounting dimension

unit: mm



Specification

Rated voltage	AC100V-AC240V	CRI	Cold white: Ra≥70
Frequency	50Hz-60Hz	Body material	Warm white: Ra≥80
Rated power consumption	300W 400W	Cover materia	Aluminum alloy
Power factor	>0.9	Safety wire material	PC/Tempered glass
Lightning surge	IEC61000-4-5	Operating temperature	Stainless steel
Electrostatic discharge	IEC61000-4-2		Ta-30°C ~ +60°C
EMC	IEC61000-4-3 IEC61000-4-6		(overheat protection)
LEDs life time	≥50000h	IP rate	IEC60529 IP67
Color temperature	Cold white: 5500K-6000K	Vibration-resistant level	IEC60068 5G
	Warm white: 2700K-3000K	IK rate	IEC62262 IK08
Lumens per Watt	Cold white: ≥ 140 lm/w	Salt spray rate	ISO9227 720H
	Warm white: ≥130 lm/w	Body color	Silver
Beam angle	15°/25°/ 60°	Weight	16 kg

LED Flood Light LF70ES



Products description and application

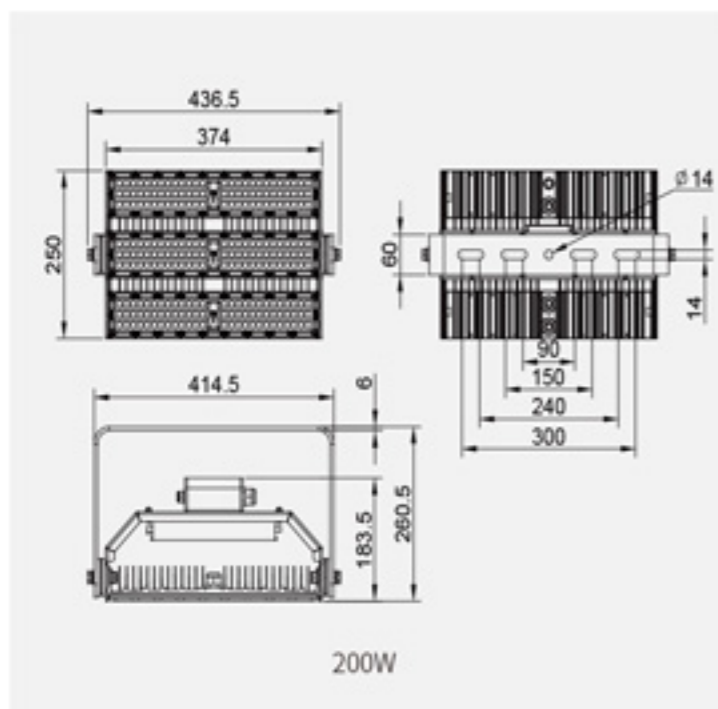
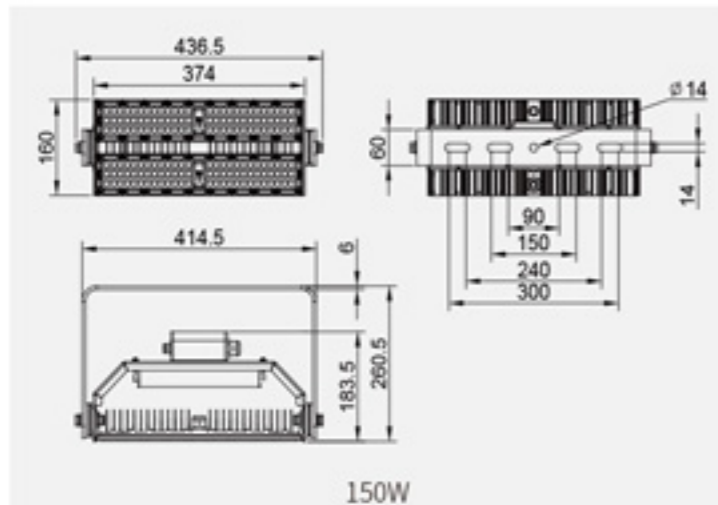
LF70ES series LED flood light is specially designed for the harsh environment application of Port, Mine site etc. Product has high luminous efficacy, C5-M level anti-corrosion capacity and 5G anti-vibration ability. Standard: IEC60068-1/IEC60068-2/IEC60529/IEC62262/EN55015 Certificate: CE

Features

- Module design, flexible combination.
- High efficient heat dissipation structure design.
- Light-weight design, easy installation.
- Series and parallel electric circuit design.
- PWM/0-5V/0-10V/time control, dimming control is available for option.

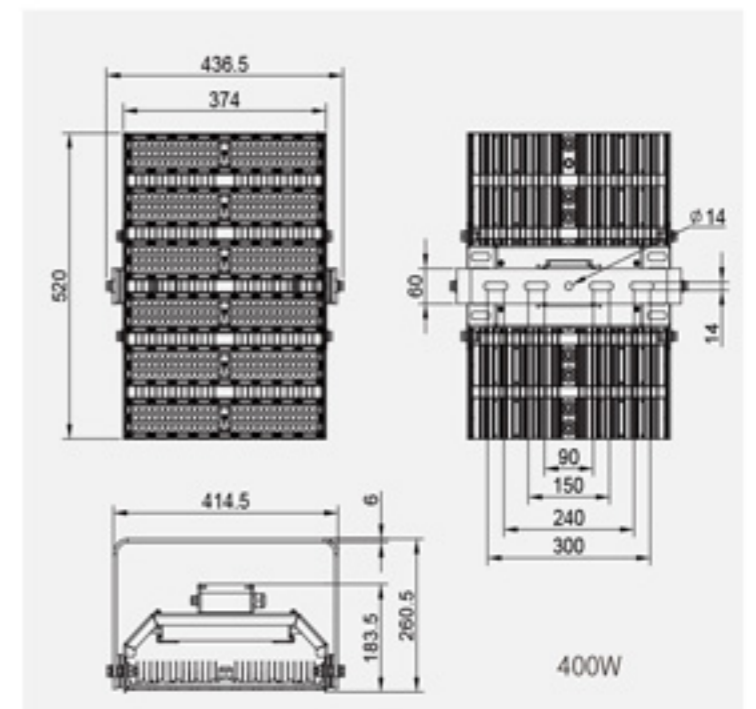
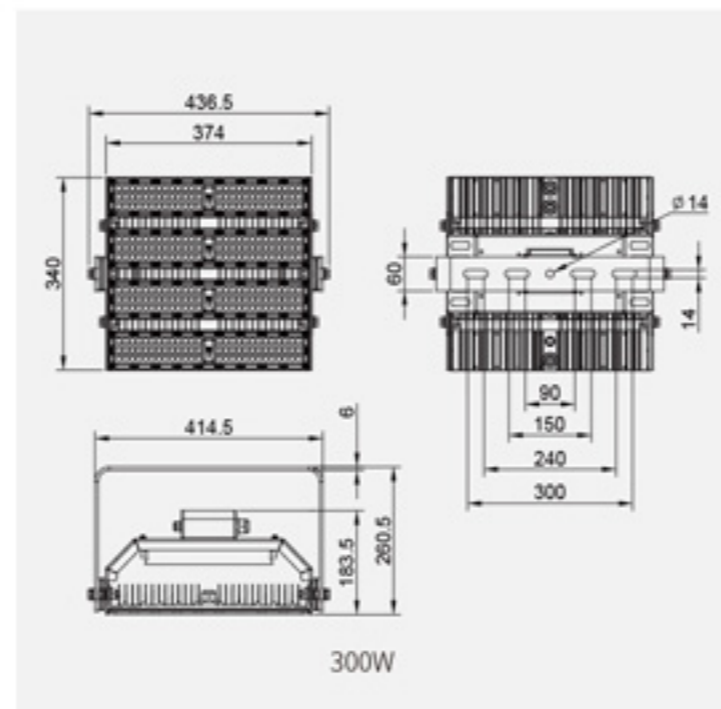
Mounting dimension

unit: mm



Specification

Rated voltage	AC100V-AC240V	LEDs life time	≥50000h
Frequency	50Hz-60Hz	Color temperature	Cold white: 5500K-6000K Warm white: 2700K
Rated power consumption	75W/150W/200W/300W 400W/600W/800w	Beam angle	25°/ 60°
Power factor	>0.9		(optional) Asymmetrical
Lightning surge	IEC61000-4-5	Body material	Aluminum alloy
Electrostatic discharge	IEC61000-4-2	Cover material	PC
EMC	IEC61000-4-3 IEC61000-4-6	Safety wire material	Stainless steel
Lumens per Watt	Cold white: 140 lm/w Warm white: 125 lm/w	Operating temperature	Ta-30°C ~ +60°C (overheat protection)
CRI	Cold white: Ra≥70 Warm white: Ra≥80	IP rate	IEC60529 IP67
Weight	75W/4Kg; 150W/5Kg 200W/8.5Kg; 300W/11.5Kg; 400W/15.5Kg; 600W/21 Kg	Vibration-resistant level	IEC60068 5G
		IK rate	IEC62262 IK08
		Salt spray rate	ISO9227 720H/ C5-M
		Body color	Silver



LED High Bay Light LF22



Products description and application

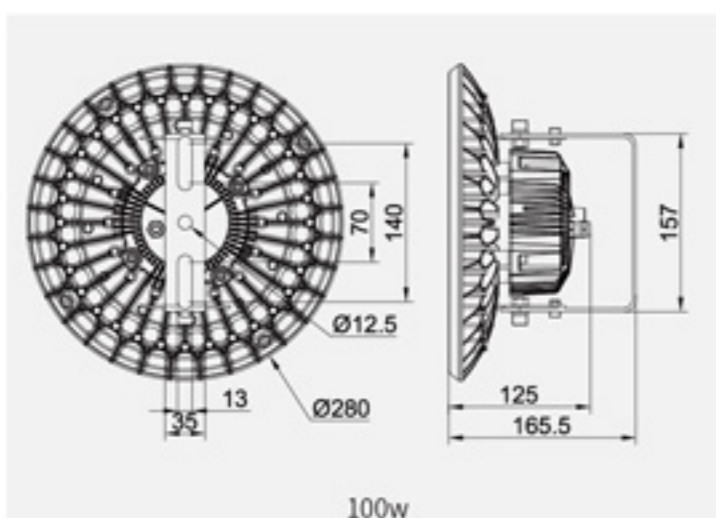
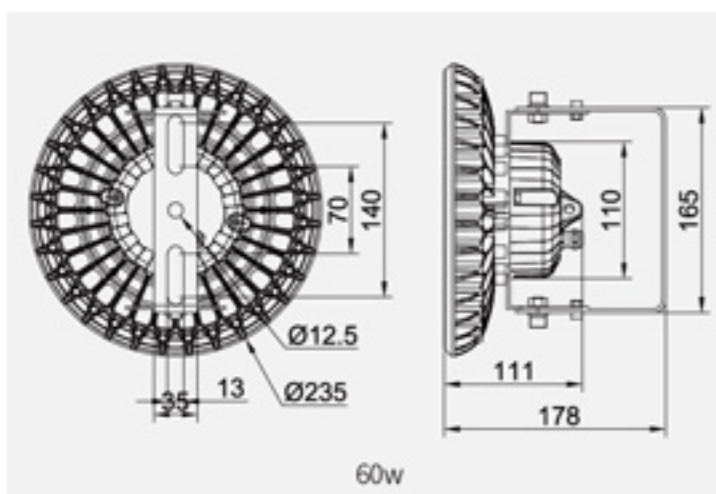
LF22 series high bay light are mainly used in large space venues, such as factories, stadiums, supermarkets, exhibition hall, buildings, and other indoor applications. The light efficiency can reach 140lm/W, creating more value for customers.

Features

- Integrated die-casting structure, metal lamp housing, high strength capacity.
- Hollow air duct design for efficient heat dissipation.
- Human-friendly light distribution, soft light, and uniform illumination.
- Anti-dust and water-proof design to reduce cleaning and maintenance cost.
- 60°/90° beam angle are optical.
- Various installation methods: Lifting mounting, Pipe mounting, Bracket mounting, etc.

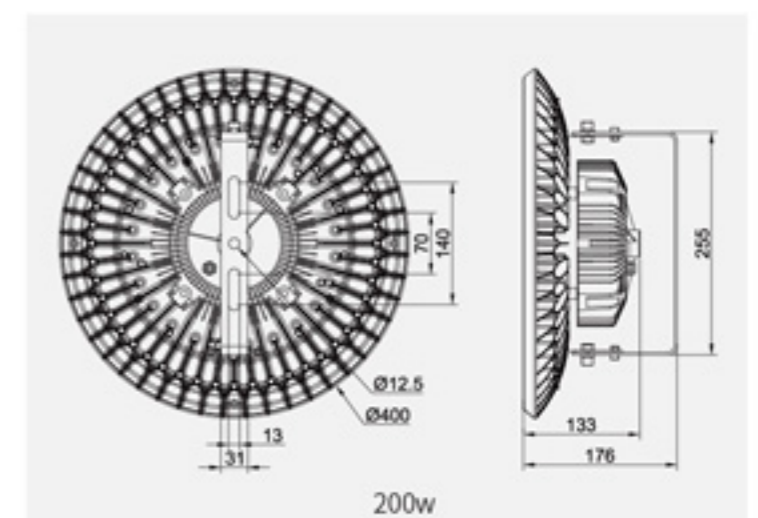
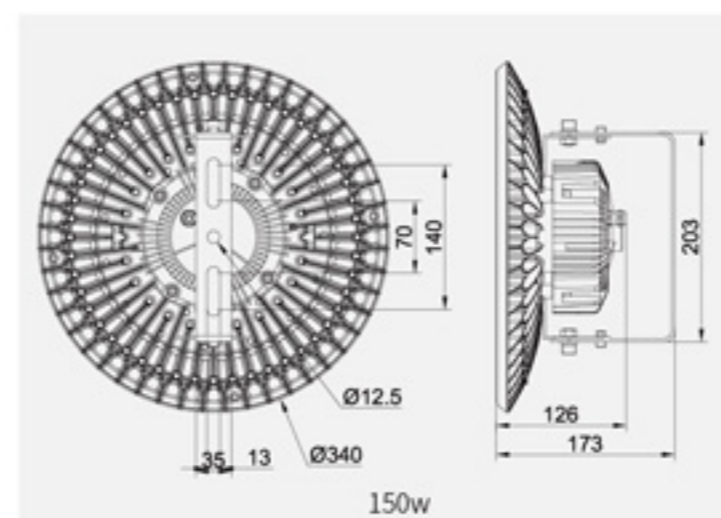
Mounting dimension

unit: mm



Specification

Rated voltage	AC100V-AC240V	Lumens per Watt	Cold white: 140 lm/w
Frequency	50Hz-60Hz		Warm white: 120 lm/w
Rated power consumption	60W/100W/ 150W/200W	CRI	Cold white: Ra≥70
			Warm white: Ra≥80
Power factor	>0.9	Body material	Aluminum alloy
EMC	IEC61000-4-2 CLASS 3	Cover material	PC
	IEC61000-4-3 CLASS 3	Safety wire material	Stainless steel
	IEC61000-4-4 CLASS 3	Operating temperature	Ta-30°C ~ +60°C
	IEC61000-4-5 CLASS 3	IP rate	IEC60529 IP65
	EN55015	Vibration-resistant level	IEC60068-2-6 2G
LEDs life time	≥50000h	IK rate	IEC62262 IK04
Beam angle	60W: 110°	Salt spray rate	ISO9227 240H
	Others: 60°/90°	Body color	Black
Color temperature	Cold white: 5500K-6000K	Weight	60W: 2kg 100W: 2.8kg
	Warm white: 2700K-3000K		150W: 3.9kg 200W: 4.7kg



LED Linear Light LW46E



Products description and application

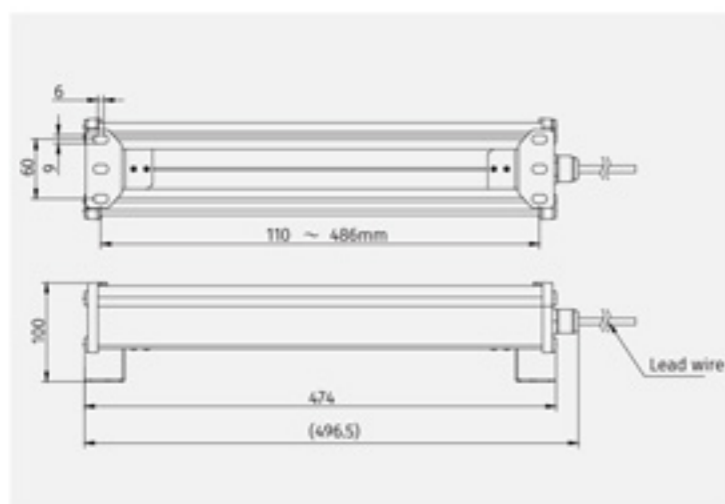
LW46E is an auxiliary light which can be used harsh environment, like port machinery (STS crane, RTG crane, RMG crane), wind turbines (nacelle, tower, hub), vessel (ceiling, walkway). Product has the features of waterproof, corrosion resistant and vibration resistant.

Features

- High luminous efficacy, high stability.
Product uses high quality LED chips and drivers, improve the luminous efficacy and operating stability.
- Tempered glass cover prevents aging problem in outdoor application.
- Wide beam angle design.
Wide beam lens design, improves the lighting uniformity on the walkway, reduce the dark area between two lights, and improve the lighting utilization.
- Long lifetime and eco-friendly.
LEDs lifetime is 50,000 hours, energy saving 50% comparing with conventional lighting, maintenance free.
- Product has compact structure, light weight, adjustable mount holes, easy to mount at site.

Mounting dimension

unit: mm



Specification

Rated voltage	AC100V-AC240V	Color temperature	Cold white: 5500K-6000K
Frequency	50Hz-60Hz	Beam angle	wide beam
Rated Power Consumption	15W	Body material	Aluminum alloy
Power factor	>0.9	Cover material	Tempered glass
Lightning surge	IEC 61000-4-5 ±2KV	Operating temperature	Ta-30°C ~ +50°C
Electrostatic discharge	IEC 61000-4-2 ±8KV	Vibration-resistant level	IEC60068 3G
	IEC 61000-4-4 ±2KV	Salt spray rate	ISO9227 720H
EMC	EN55015	IP rate	IEC60529 IP65
Lumens per Watt	120 lm/w	Body color	Silver
CRI	Ra≥70	Weight	2.2kg
LEDs life time	≥50000h		

LED Linear Light LW46



Products description and application

Nanhua LED walkway light is specially designed as the lighting system for the cabin room and walkway of the port machinery (STS crane, RMG crane, RTG cranes, Mobile harbor cranes), interior luminaires of wind turbines (nacelle, tower and hub) and ceiling and passages of marine vessels.

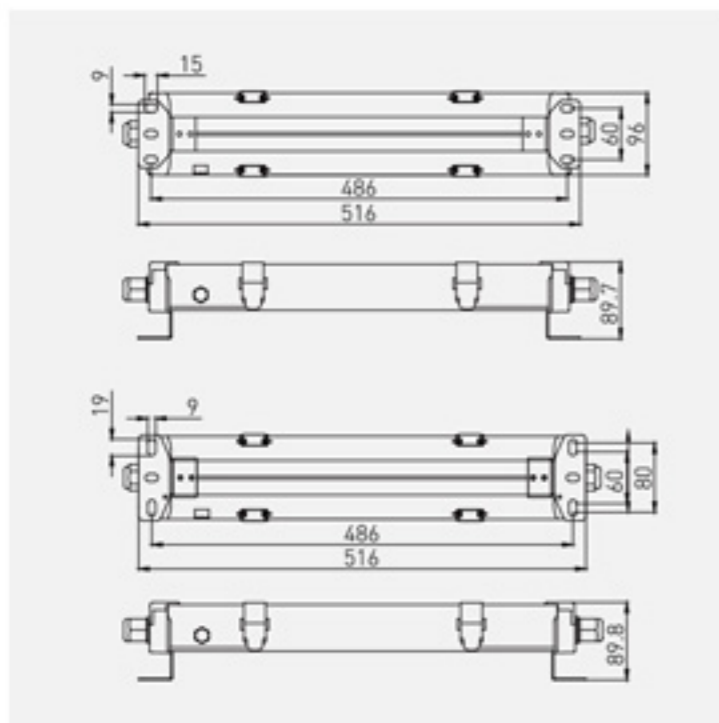
Features

- High luminous efficacy, superb stability with high quality LED chips and drivers.
- Tempered glass cover prevents aging problem in outdoor application.
- Regular beam, wide beam angle design to improve the uniformity.
- 50,000 hours Long lifetime and eco-friendly.
- Compact and light weight structure, adjustable mount holes for easy onsite installation.



Mounting dimension

unit: mm



Specification

Rated voltage	AC100V-AC240V/ DC12V-DC48V	Beam angle	120°
Frequency	50Hz - 60Hz	Lumens per Watt	100lm/W
Rated power consumption	12W	LEDs life time	≥50,000h
Power factor	>0.9	IP rate	IEC60529 IP65
Color temperature	5500K-6000K	Salt spray rate	ISO9227 720H
CRI	Cold white: Ra >70°	Mount	Screw mount
Operating temperature	Ta -40°C ~ +50°C	Body color	Silver
Storage temperature	Ta -40°C ~ +70°C	Weight	2.5 kg
Material	Cover: Tempered glass, Body: Aluminum		

LED Emergency Linear Light LY46



Products description and application

Specially designed as the emergency lighting system for the cabin room and walkway of the port machinery (STS crane, RMG crane, RTG cranes, Mobile harbor cranes), interior luminaires of wind turbines (nacelle, tower and hub) and ceiling and passages of marine vessels.

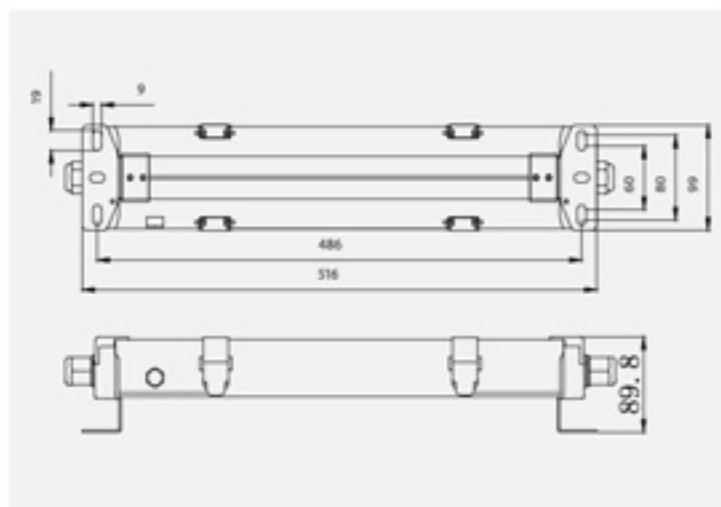
Features

- Use 5mm tempered glass diffuser to prevent aging problem in outdoor application. Frosted finishing process to prevent the glaring.
- Lifetime of LED light source up to 50,000hrs. With the long-term operational stability and maintenance free.
- Compact structure features small size and light weight. Adjustable mounting bracket makes it convenient for the field installation.
- The light is working and the battery is charging when it is powered. Battery works and light is in emergency mode when main power is off.
- Emergency time is not less than 90 minutes.



Mounting dimension

unit: mm



Specification

Rated voltage	AC100V-AC240V/ DC12V-DC48V	Lumens per Watt	100lm/W
Color temperature	5500K-6000K	CRI	Cold white: Ra≥70
Frequency	50Hz ~ 60Hz	Beam angle	>120°
Rated power consumption	17W	LEDs life time	≥50,000h
Power factor	>0.9	Relative humidity	10% - 95%RH
Emergency time	90min		(non condensing)
Operating temperature	Ta -30°C ~ +40°C	IP rate	IEC60529 IP65
Storage temperature	Ta -40°C ~ +70°C	Salt spray rate	ISO9227 720H
Material	Cover: Tempered glass, Body: Aluminum	Weight	3kg
		Body color	Silver

LED Linear Light LW456



Products description and application

Specially designed as the lighting system for the machinery house, cabin of the port machinery ((STS crane, RMG crane, RTG cranes, Mobile harbor cranes), suitable for harsh application.

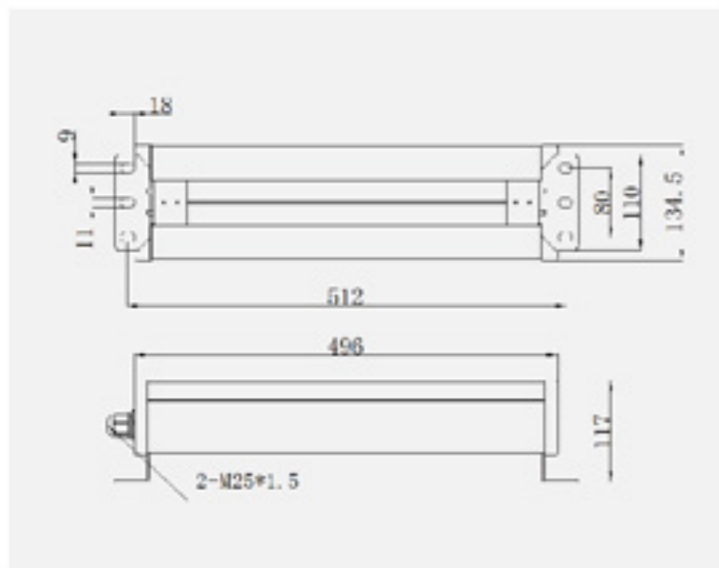


Features

- High luminous efficacy, superb stability with high quality LED chips and drivers
- PC diffuser makes lighting softly, protect eyes, no glaring.
- LED light source, Long life time up to 50,000 hours.
- Dimming control is optional.

Mounting dimension

unit: mm



Specification

Rated voltage	AC100V-AC240V	Color temperature	5500K-6000K
Rated power consumption	45W	Luminous flux	4000lm
Frequency	50Hz - 60Hz	CRI	Ra>70
Lightning surge	IEC 61000-4-5 ±2KV	Operating temperature	-40°C ~ +50°C
Electrostatic discharge	IEC 61000-4-2 ±8KV	Storage temperature	-40°C ~ +70°C
EFT	IEC 61000-4-4 ±2KV	Material	Cover: PC, Body: Aluminum
EMC	EN55015	IP rate	IP54
LEDs life time	≥50,000h	Weight	2.2 kg

LED Emergency Linear Light LY456



Products description and application

Specially designed as the emergency lighting system for the machinery house, cabin of the port machinery (STS crane, RMG crane, RTG cranes, Mobile harbor cranes), suitable for harsh application.

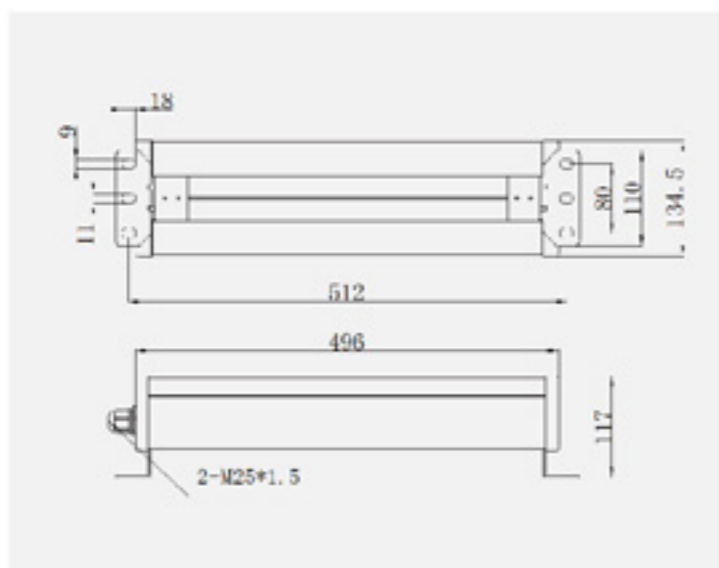
Features

- High luminous efficacy, superb stability with high quality LED chips and drivers.
- PC diffuser makes lighting softly, protect eyes, no glaring.
- LED light source, Long life time up to 50,000 hours.
- Emergency time is more than 90 minutes.
- Dimming control is optional.



Mounting dimension

unit: mm



Specification

Rated voltage	AC100V-AC240V	Color temperature	5500K-6000K
Rated power consumption	50W	Luminous flux	4000lm
Frequency	50Hz ~ 60Hz	CRI	Ra>70
Lightning surge	IEC 61000-4-5 ±2KV	Operating temperature	-40°C ~ +50°C
Electrostatic discharge	IEC 61000-4-2 ±8KV	Storage temperature	-40°C ~ +70°C
EFT	IEC 61000-4-4 ±2KV	Material	Cover: PC, Body: Aluminum
EMC	EN55015	IP rate	IP54
LEDs life time	≥50,000h	Weight	2.2 kg

LED Linear Light LW34L



Products description and application

LW34L series LED lights are mainly used as the indoor and outdoor lighting for port equipment; it also can be used as auxiliary lighting in the harsh environment (waterproof, anti-corrosion and anti-vibration fields).

Standard: IEC60598-1/IEC60068-2/IEC60529/IEC62262/EN55015

Certification:CE

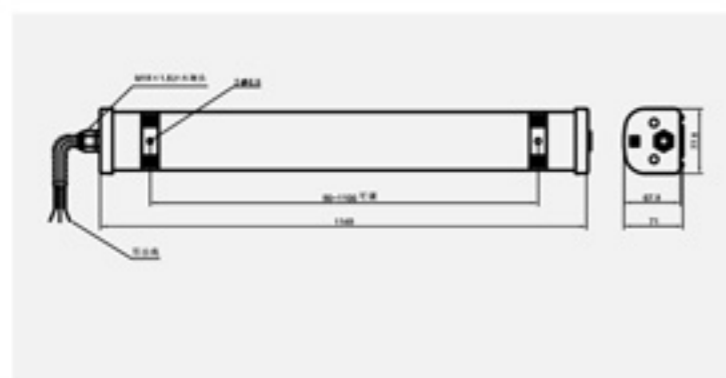
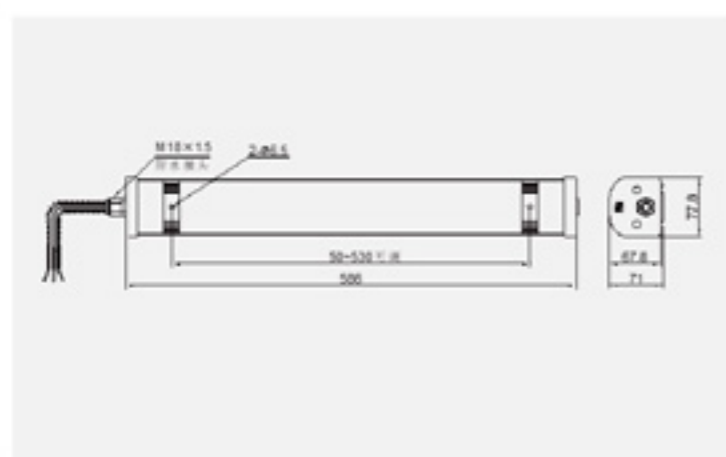
Features

- Soft light beam,PC grain housing makes the light beam softly, to protect eyes.
- Long life, energy saving and environmental protection.
- Constant-current drive, long-term stable operation without maintenance.
- Protect eyesight to prevent fatigue: no flicker, not easy to produce visual fatigue during long-term work.
- Lightweight design, full PC material, corrosion resistance, anti-aging properties.
- Simple installation, excellent anti-vibration effect.



Mounting dimension

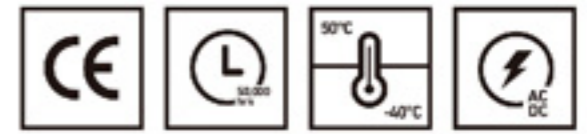
Unit: mm



Specification

Rated voltage	AC230V±10%	Anti-corrosion	ISO9227 720H
Rated power consumption	0.083~0.090A	LEDs lifetime	≥50000h
Frequency	50Hz/60Hz	Color temperature	Cold white: 5000K~6000K
EMC	18W/36W	Lumens	Cold white: 1800lm/3800lm
	>0.9	Luminous Efficiency	105 lm/W/115 lm/W
	IEC61000-4-2 ±8kv	Body material	PC
	IEC61000-4-3	Cover material	PC
	IEC61000-4-4 ±2kv	Mount	M6 stainless steel bolt
	IEC61000-4-5 ±2kv	IP rate	IEC60529 IP65
Connect	IEC61000-4-6	Body color	White
	EN55015	Weight	0.7kg 1.0kg
Anti-vibration	IEC60068-2-6 5G		

LED Cabinet Light LW103

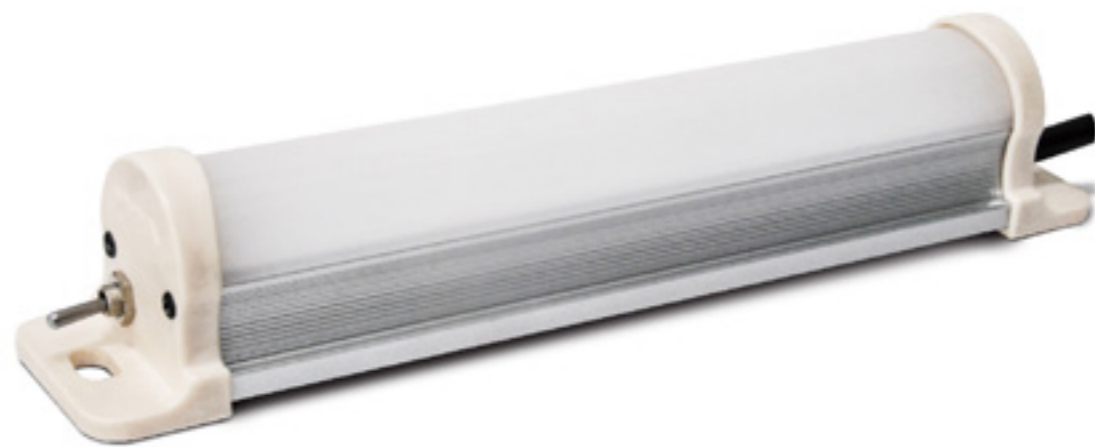


Products description and application

Applied to electric cabinet, other cabinets, equipment and other applications for auxiliary lighting.

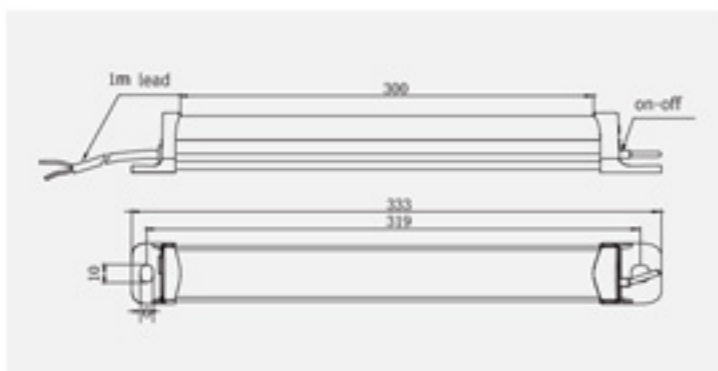
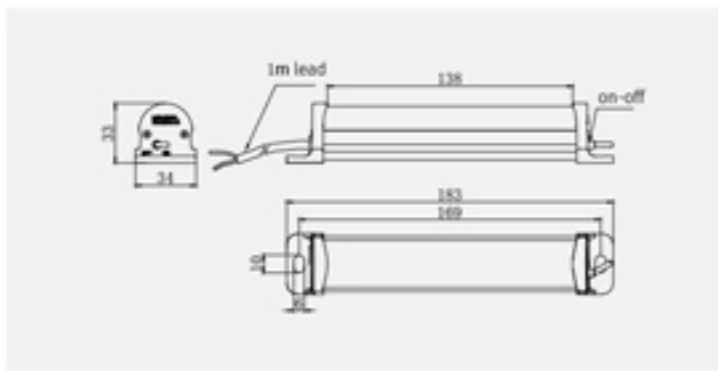
Features

- LED lighting technology, high brightness and low power consumption.
- Built-in On/Off switch, long term continuous operating.
- Product comes with lead wire, easy for wire connection.
- Sealed structure, vibration resistant



Mounting dimension

unit: mm



Specification

Rated voltage	AC100V ~ AC240V/DC24V	CRI	Ra>72
Rated power consumption	3W/6W	Operating temperature	-40°C ~ +50°C
Color temperature	6000K-7000K	Storage temperature	-40°C ~ +70°C
Lumen per Watt	100lm/w	Weight	0.1kg (3W) 0.2kg (6W)
Frequency	50Hz ~ 60Hz	Material	Cover: PC, Body: Aluminum alloy
LEDs life time	≥50,000h		

LED Work Light LW15



Products description and application

LW15 series LED work lights adopt engineering machinery lighting technology. Product has features of long lifetime, safety operation, maintenance free by using reliable LED light source, suit for the application of engineering machinery, mining machinery, heavy duty truck, etc.

Standard: GB7000.1/GB2423/DIN40050/
GB4208/ IEC60529/ IEC60598/ IEC62262/
EN 55015/ CISPR 15.

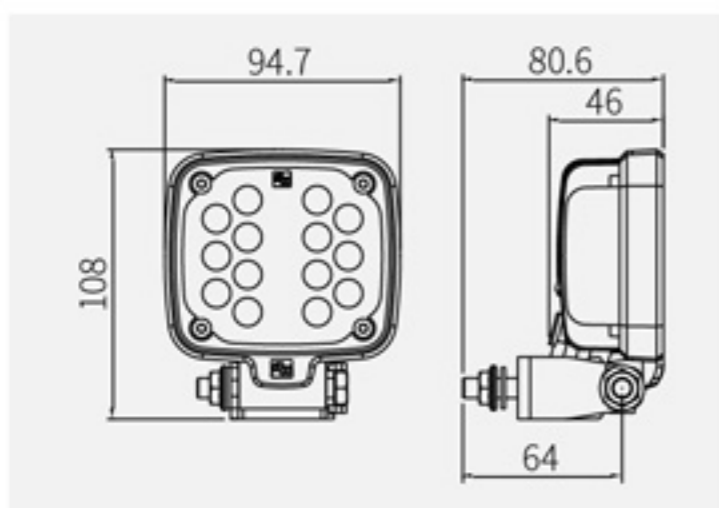
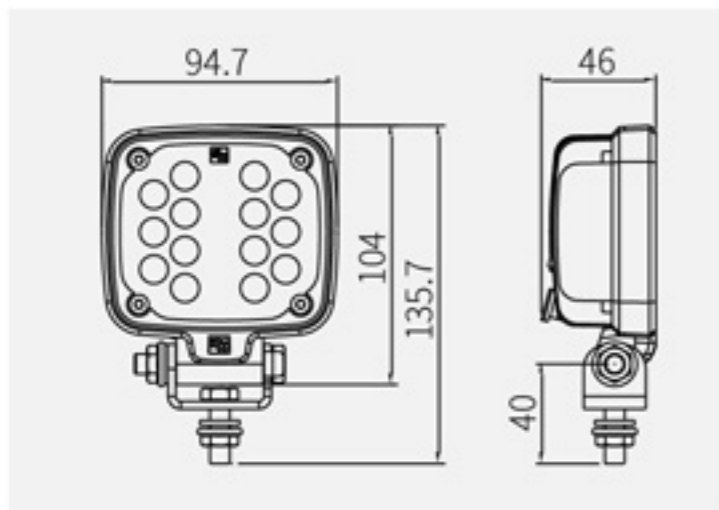
Features

- Engineering lighting technology. Product uses reliable and high efficient LED light source, has the advantages of high brightness, long lifetime, energy saving and environment friendly.
- Integrated lens and housing design, professional light pattern.
- Multi color temperatures for option. Product has high color rendering index with good color rendering, prevent glaring, and improve visibility.
- Product has built-in connector, easy to use.



Mounting dimension

unit: mm



Specification

Rated voltage	DC9V-DC14V/DC18V-DC32V	Color temperature	Cold white : 5700K
Rated Power Consumption	14W/16W/18W		Warm white : 2700K
Lightning surge	GB/T 17626.2-2006 ±1000V	Beam angle	30°
Electrostatic discharge	GB/T 17626.5-2008 ±8KV	Body material	Aluminum alloy
EMC	EN 55015/ CISPR 15	Cover material	PC
LEDs life time	≥50000h	Operating temperature	Ta -40°C ~ +85°C
IK rate	IK08	IP rate	IEC60529 IP68/IP69K
Salt spray rate	ISO9227 720H / C5-M	Anti-vibration	IEC60528 30G
Wiring	Connector / Lead wire	Anti-shock	IEC60528 60G
Luminous flux	Cold white : 1400lm/ 1600lm/1800lm	Body color	Black
	Warm white : 950lm/ 1050lm/1200lm	Mount	M10 stainless steel bolt
		Weight	0.4kg

LED Work Light LW21



Products description and application

LW21 series LED work lights adopt engineering machinery lighting technology. Product has features of long lifetime, safety operation, maintenance free by using brand high power LED light source, suit for the application of engineering machinery, mining machinery, heavy duty truck, etc.

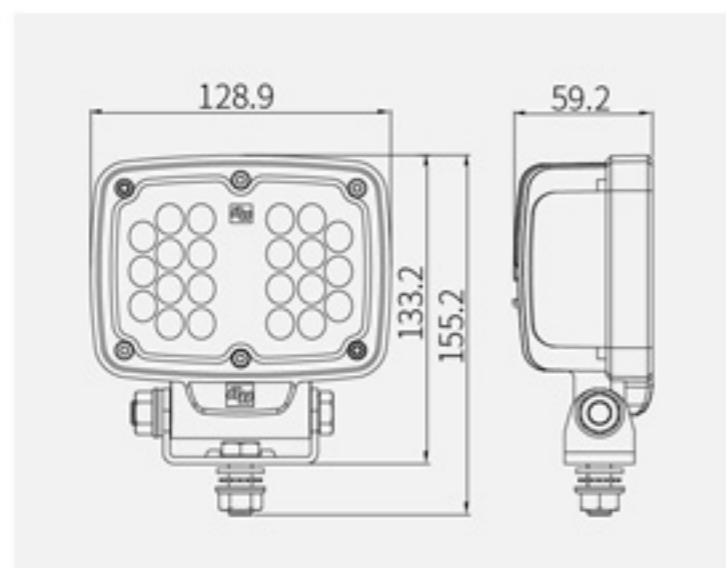
Standard: GB7000.1/GB2423/-
DIN40050/GB4208/IEC60529/ IEC60598/
IEC62262/ EN 55015/ CISPR 15.

Features

- Engineering lighting technology. Product uses reliable and high efficient LED light source, has the advantages of high brightness, long lifetime, energy saving and environment friendly.
 - Fin type structure design, product has good integrity, excellent heat dissipation, light weight and good anti-vibration capacity.
 - Special finish technology, product has sealed structure, anti-corrosion and anti-oxidation, suit for strong salinity coastal areas.
 - Multi color temperatures for option. Product has high color rendering index with good color rendering, prevent glaring, and improve visibility.
 - Wide input voltage range, product has protection circuits of over voltage, over temperature, short circuit, product operates more stable by using constant current design.
- Product has built-in connector, easy to use.

Mounting dimension

unit: mm



Specification

Rated voltage	DC18V-DC32V	Beam angle	50°×30°
Rated power consumption	18W 20W	Body material	Aluminum alloy
Lightning surge	GB/T 17626.2-2006 ±1000V	Cover material	PC
Electrostatic discharge	GB/T 17626.5-2008 ±8KV	Operating temperature	Ta -40°C ~ +70°C
EMC	EN 55015/ CISPR 15	IP rate	IEC60529 IP68/IP69K
Wiring	Connector / Lead wire	Anti-vibration	IEC60528 20G
LEDs life time	≥50000h	Anti-shock	IEC60528 60G
IK rate	IK08	Body color	Black
Salt spray rate	ISO9227 720H / C5-M	Color temperature	Cold white: 5700K
Luminous flux	Cold white: 2260lm(18W)	Mount	Warm white: 2700K
	2550lm(20W)		M10 stainless steel bolt
	Warm white: 1500lm(18W)	Weight	0.6kg
	1800 lm(20W)		

LED Work Light LW22



Products description and application

LW22 series LED work lights adopt engineering machinery lighting technology. Product has features of long lifetime, safety operation, maintenance free by using reliable LED light source, suit for the application of engineering machinery, mining machinery, heavy duty truck, etc.

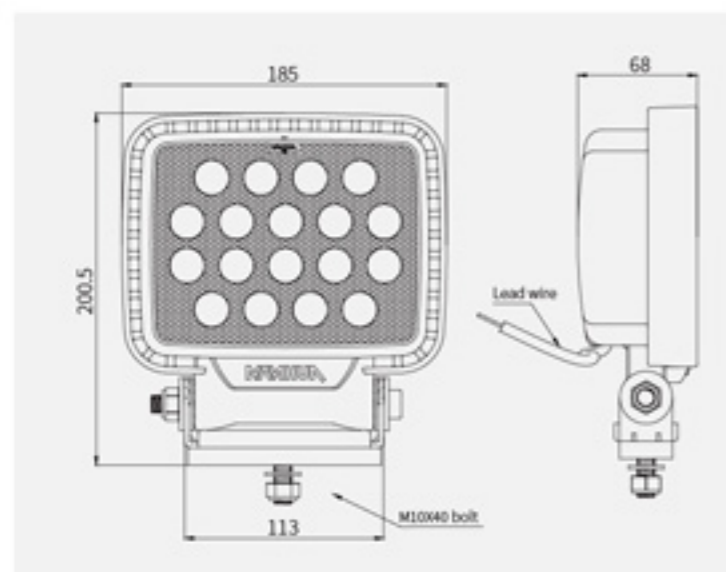
Standard: GB7000.1/GB2423/DIN40050/GB4208

Features

- Engineering lighting technology. Product uses reliable and high efficient LED light source, has the advantages of high brightness, long lifetime, energy saving and environment friendly.
- Integrated heat sink and housing design, has advantage of good heat dissipation ability, light weight, strong vibration resistant capacity.
- Special finish technology, product has sealed structure, anti-corrosion and anti-oxidation, suit for strong salinity coastal areas application.
- Adjustable mount bracket, range from 0° to 180°
- Complies with EN 55015/ CISPR 15, avoid interference.
- Complies with IEC6100, Lightning surge 0.5KV, Electrostatic discharge 4KV.
- Function optional: 1. Photocell control, 2. Infrared sensor 3. Remote control

Mounting dimension

unit: mm



Specification

Rated voltage	DC12V-DC32V/DC48V/ AC200-240V	Beam angle	30°
Rated power consumption	48W	Body material	Aluminum alloy
Lightning surge	GB/T 17626.2-2006±500V	Cover material	PC
Electrostatic discharge	GB/T 17626.5-2008±4KV	Operating temperature	Ta -30°C -60°C
EMC	EN 55015/ CISPR 15	IP rate	IEC60529
Wiring	Connector / Lead wire	Anti-vibration	IP68/IP69K
LEDs life time	≥50000h	Anti-shock	IEC60528 20G
IK rate	IK08		IEC60528 60G
Salt spray rate	ISO9227 720H/ C5-M	Body color	Black
Color temperature	Cold white: 5700K	Mount	M10 bolt
	Warm white: 2700K	Weight	1.8kg
Luminous flux	Cold white: 4550lm Warm white: 3500lm		

SIGNALS



Audible Visual Alarm BC-8



Products description and application

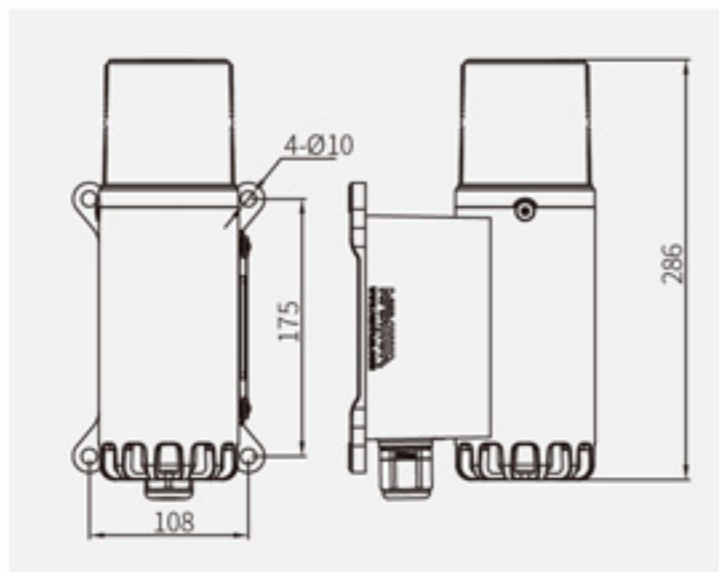
BC-8 audible visual alarm device adopts international advanced audible visual control technology, specially designed for Port machinery (STS crane, gantry crane, mobile harbor crane), Engineering machinery (Mobile crane, traveling crane), factory, chemical plants, mining sites, ocean vessel, etc.

Features

- Die-cast aluminum enclosure, light weight and corrosion resistant.
- Sealed structure design, dustproof and waterproof.
- Super bright LED technology, life span up to 50,000 hours.
- Fresnel PC housing provides excellent impact resisting strength, thermal stability and gloss.
- Professional integrated circuit design provides strong anti-EMI capability.
- Various tones and adjustable volume.

Mounting dimension

unit: mm



Specification

Rated voltage	AC36V/AC48V/AC110V/AC220V AC250V/AC380V/DC24V/DC110V/DC220V	Color	Red, Yellow (optional)
Alarm mode	Visible and Audible	IP rate	IP65
Frequency	50Hz ~ 60Hz (AC)	Operating temperature	-30°C ~ +70°C
Rated power consumption	<20W	Relative humidity	10% ~ 95% (non condensing)
Tone	16 kinds tone selectable via DIP switch	Material	Body: Aluminum alloy Light cover: PC
Sound level	116dB (Max.)	Weight	3.0kg
Volume adjustable	Yes		

High-power Audible Visual Alarm AL120



Products description and application

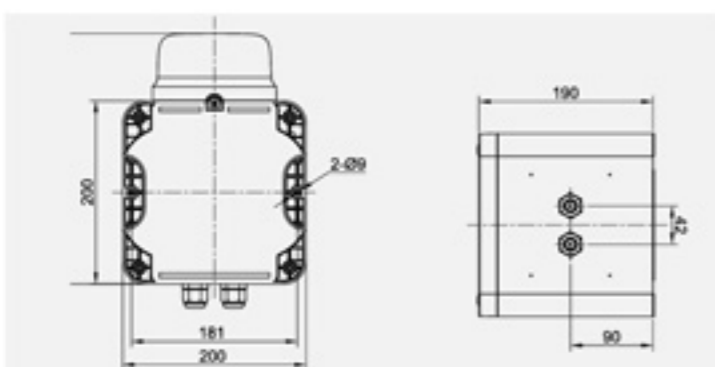
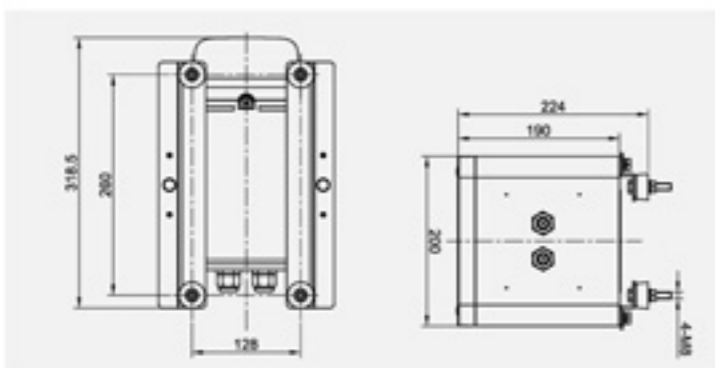
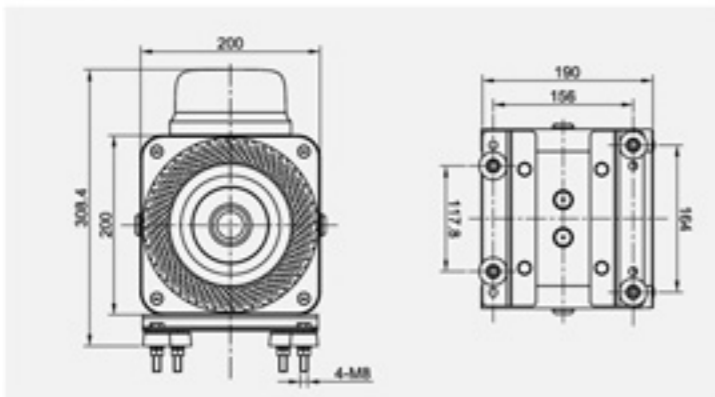
Special design for all kinds of engineering machinery (Mobile crane, crawler crane, overhead traveling crane etc.), Port machinery (harbour cranes, gantry crane, etc)

Features

- The products are sealed with structural glue, to ensure the good waterproof and dustproof of the product.
- Super bright RGB, and the life is more than 100,000hrs.
- Lamp housing employs PC, providing good intensity, thermal stability and good finishing surface.
- Special integrated core, providing strong electromagnetic anti-interference capability.
- Industrial microchip design, integrated with a variety of tones, can choose the corresponding tone according to different venues, which can expand the application of the product.

Mounting dimension

unit: mm



Specification

Voltage	DC18V~48V/AC100V~240V	Body material	PC/ABS
Frequency	50Hz/60Hz	Cover material	PC
Power	<45W	Color	Red
Tone	Memory card customization	IP rate	IEC60529 IP65
Single/doublevoice	Memory card customization	Ambient temperature	Ta-30 °C ~+55 °C
Alarm mode	audible and visible separately	Humidity	10%~95%RH
Sound level	>120dB(max)	Mounting type	Wall mounting / Wall mounting (with bracket) / Floor mounting
Light source	LED	Wring type	Cable gland M20(φ6-12.5)
Color	RGB	Weight	3Kg
Ligt span	100,000h		

Alarm Sounder BC-8A



Products description and application

BC-8A alarm sounder adopts international advanced electronic product technology, specially designed for Engineering machinery (traveling crane, mobile crane, crawler crane), Port machinery (STS crane, gantry crane, harbor crane), etc.

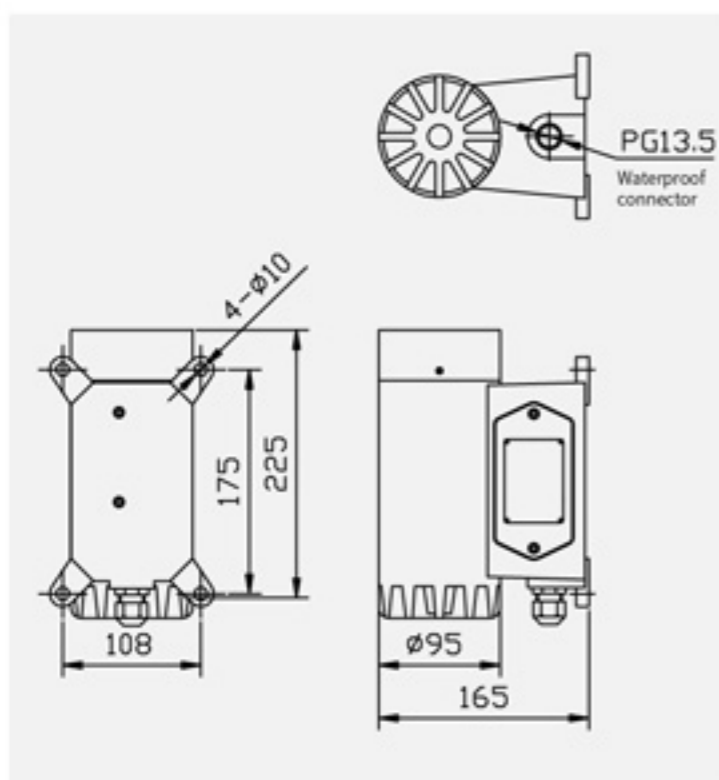
Features

- Die-cast aluminum enclosure, light weight and corrosion resistant.
- Sealed structure design, dustproof and waterproof.
- Professional integrated circuit design provides strong anti-EMI capability.
- Various tones and adjustable volume.



Mounting dimension

unit: mm



Specification

Rated voltage	AC24V/AC36V/AC48V/AC110V/	Color	Red, Yellow (optional)
	AC220V/ AC380V /DC24V		IP rate
Alarm mode	Audible alarm	Operating temperature	-30°C ~ +70°C
Frequency	50Hz-60Hz	Relative humidity	10% ~ 95% (non condensing)
Rated power consumption	<20W	Material	Body: Aluminum alloy
Tone	16 kinds tones selectable	Weight	Light cover: PC
	via DIP swith		2.7kg
Sound level	116dB	Volume adjustable	Yes

High-power Electronic Siren BC-30



Products description and application

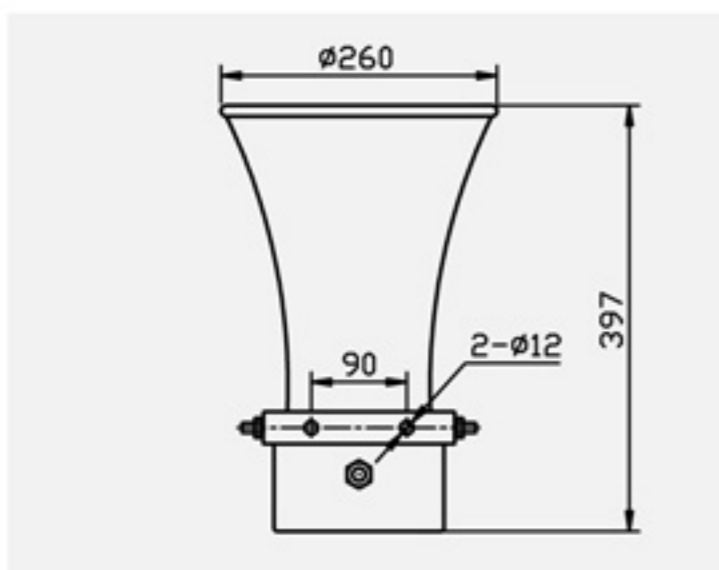
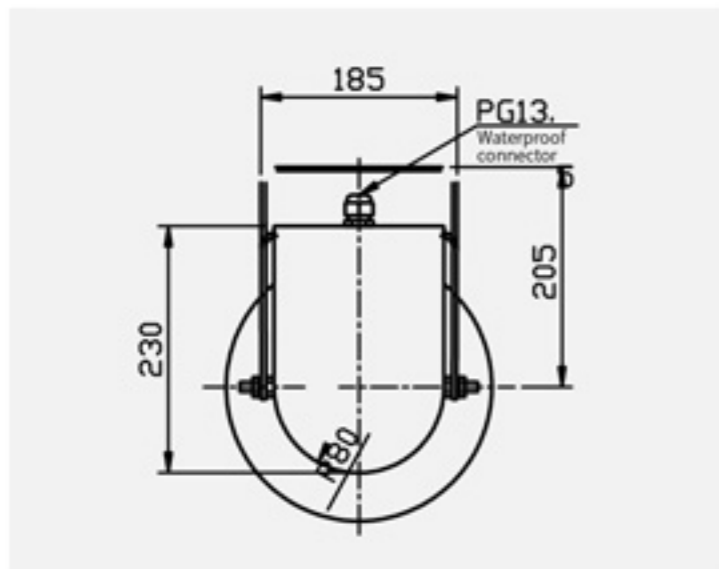
BC-30 is a 30W high power electronic siren, easy to use, specially designed for engineering machinery (mobile crane, crawler crane, overhead traveling cranes, etc.), Port machinery (STS crane, gantry crane, harbor crane), etc.

Features

- Clear and distinct sound quality and powerful performance.
- Output power: 30W.
- Clear and distinct sound quality and powerful performance.
- Easy control, alarm can be realized as long as power connected.
- Flexible installation, various environment application.
- Work stable and reliable.
- Horn type structure, long distance of sound transmission.

Mounting dimension

unit: mm



Specification

Rated voltage	AC220V/DC24V (others can be customized)	Sound level	108dB
Alarm mode	Audible alarm	IP rate	IP65
Frequency	50Hz-60Hz	Operating temperature	-30°C ~ +70°C
Rated power consumption	30W	Relative humidity	10% ~ 95% (non condensing)
Tone	A,B,E,D,Y,L, speech (others can be customized)	Material	Body: Aluminum alloy
Speaker impedance	8Ω	Weight	5.0kg

Crane Loudspeaker & Controller Kit BC-2



Products description and application

BC-2 is Crane Loudspeaker & Controller Kit is specially designed for engineering machinery (mobile crane, crawler crane, overhead traveling cranes, etc.), Port machinery (STS crane, gantry crane, harbor crane), etc.



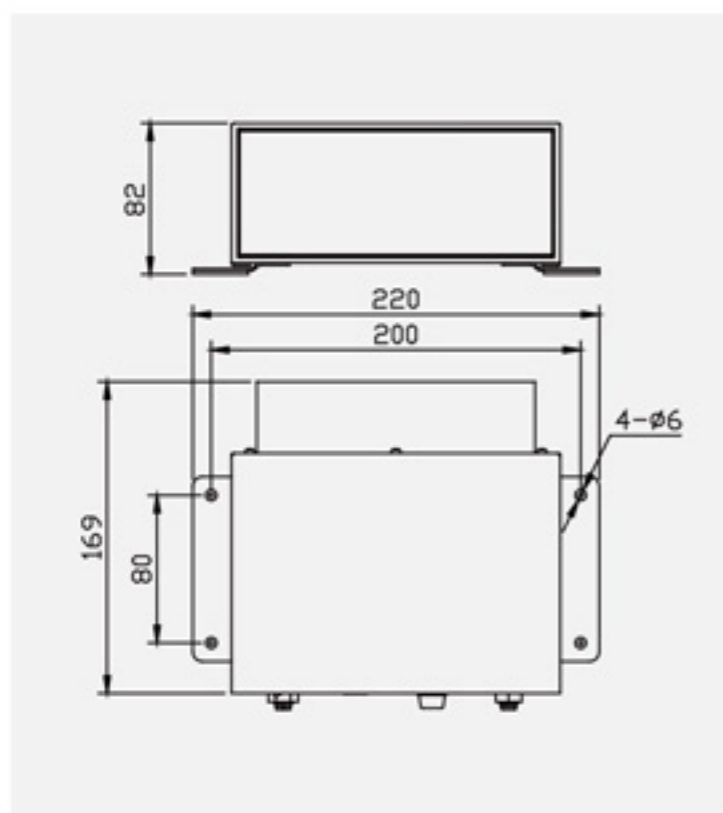
Features

- Various alarm sounds for selection.
- Volume adjustable.
- Microphone & Loudspeaker available.
- Delay alarming function (optional).
- Audible and visual alarm at the same time (optional).
- Several kinds of combination mode for selection.



Mounting dimension

unit: mm



Specification

Rated voltage	AC110V/AC220V	Speaker parameter	10W/8Ω 25W/16Ω 50W/16Ω
Frequency	50Hz-60Hz	Operating temperature	-20°C ~ +70°C
Rated power consumption	10W-100W	Relative humidity	10% - 95% (non condensing)
Tone	A,B,E (others can be customized)	Material	Controller: Cold rolled plate
		Weight	Controller: 3Kg
Sound level	106dB-110dB		

Model selection table

Model	Rated power consumption	Speaker parameter	Handset
BC-2	10W	YH10-2/ YH102A 10W/8Ω	SS handheld SE Goose neck choice
	25W	YH25-3 25W/16Ω	
	50W	YH50-3 50W/16Ω	
100W		YH25-3 25W/16Ω*2	
		YH50-3 50W/16Ω+YH25-3 25W/16Ω*2	
		YH25-3 25W/16Ω*4	

Warning Beacon LR13



Products description and application

Specially designed for use in material handling equipment, such as engineering machinery (overhead cranes, crawler cranes, mobile cranes), port machinery (Quay cranes, gantry cranes).

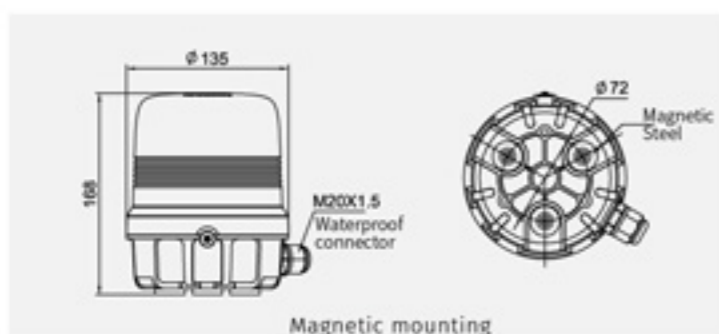
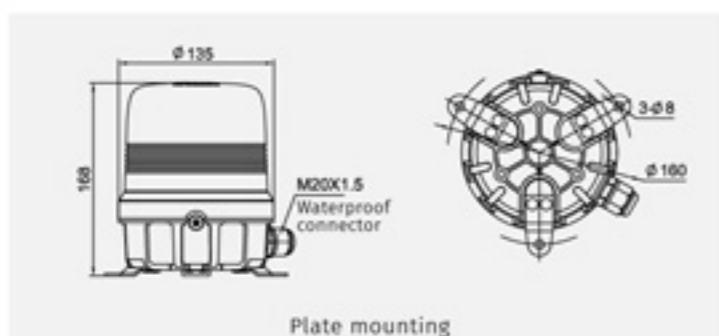
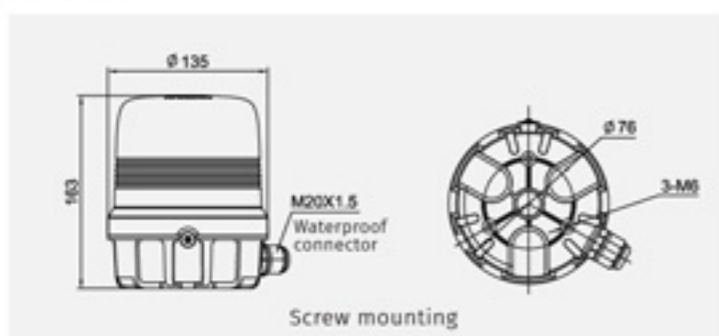
Features

- Super bright LED light source with advantages of long lifetime, energy saving and environment friendly, instant on/off.
- Adopts single independent constant-current and digit control technology, product works is stability and durability.
- Modular structure design, easy for further maintenance.
- Water proof, anti-corrosion, vibration resistant and UV resistant.
- Various mount and wiring type for optional.
- 380VAC/460VAC transformer box can be external connected.



Mounting dimension

unit: mm



Specification

Rated voltage	DC8V-14V/DC18V-32V/ AC110-AC240V AC380V/AC460V	Intensity	≥300cd
Rated power consumption	≤40W	Material	Body: PA6+30%GF, Light cover: PC
Alarm mode	Flash, Steady burning Rotating, Strobe flash	Operating temperature	Ta-40 °C ~ +75 °C
Light source	LED	Relative humidity	10%-95%RH
Color	Red, Amber (optional)	IP rate	IP66
		Weight	0.8 kg

Spreader Indicator ABC-16



Products description and application

Specially designed as spreader indicator for spreader status indication, applied for port machinery (Quay cranes, gantry cranes, reach stacker, ECH).



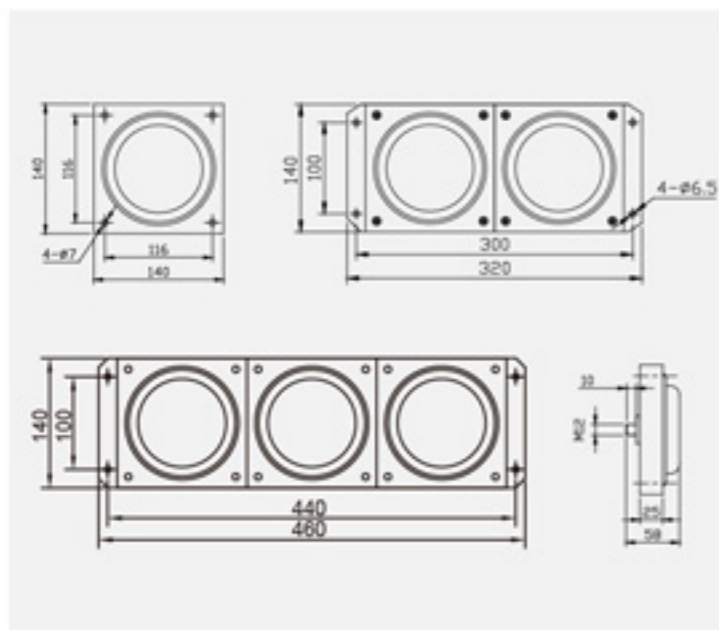
Features

- Die cast aluminum enclosure, light weight and corrosion resistance.
- Sealed structure, waterproof and dustproof.
- Super bright LED design, lifetime up to 50,000hrs.
- Flexible combination mode for wide application.



Mounting dimension

unit: mm



Specification

Rated voltage	AC110V-AC240V/DC12V/ DC24V/DC48V	Wiring	Lead wire or connector (optional)
Frequency	50Hz ~ 60Hz	Length of lead wire	8m
Rated power consumption	≤5W	IP rate	IP65
Color	Red, Yellow, Green, Blue, White(optional)	Operating temperature	-40°C ~ +70°C
Visual distance	>300m	Relative humidity	10% ~ 95% (non condensing)
LEDs life time	≥100,000h	Material	Body: Aluminum alloy
Lamp cover type	Transparent or Frosted		

Model selection table

Model	Quantity of light	Operating current	Wiring	Weight
ABC-16	Single light ABC-16	<300mA	4-pin connector or one 3-core cable	1kg
ABC-16B	Two lights combination ABC-16	<500mA	4-pin connector or two 3-core cable	3.8kg
ABC-16C	Three lights combination ABC-16	<700mA	4-pin connector or three 3-core cable	5.7kg
ABC-16D	Four lights combination ABC-16	<1A	4-pin connector or four 3-core cable	7.6kg
ABC-16E	Five lights combination ABC-16	<1.2A	4-pin connector or five 3-core cable	9.5kg

Industrial Traffic Light ABC3Pro



Products description and application

ABC3Pro industrial traffic light is specially designed as power indicator, traffic lights for gantry crane, hoisting cranes.

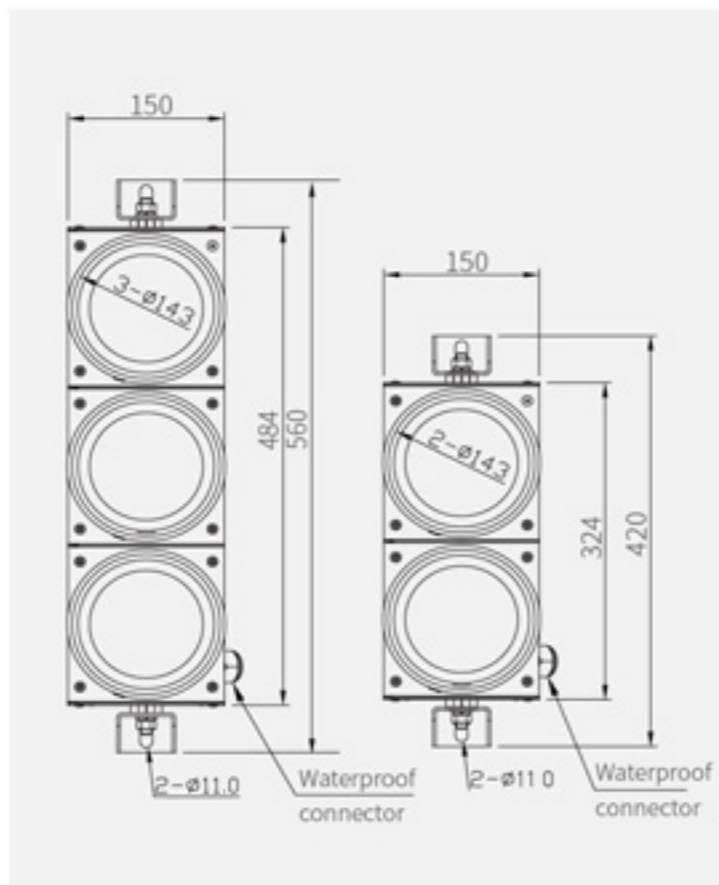
Features

- Aluminum enclosure, durable and reliable, light weight and corrosion resistant.
- LED light source, long life time.
- Multiple seal structure, high ingress protection grade.
- Easy to mount, lamp numbers and colors are flexible combination.



Mounting dimension

unit: mm



Specification

Rated voltage	DV24V/AC110V/AC220V/	Wiring	Y type
	AC380V/AC460V		Operating temperature
Frequency	50Hz-60Hz	Relative humidity	10% - 95% RH (non condensing)
Visual distance	>300m	IP rate	IP65
Operating mode	Steady burning (Flash type	Material	Aluminum alloy+Plastic (optional)
	can be customized)		Mount type
Color	Red, Yellow, Green,	Weight	Vertical mount
	Blue (optional)		Two lights combination: 4kg,
LEDs life time	100,000h		Three lights combination: 5.7kg

Arrow Panel Display ABC-18

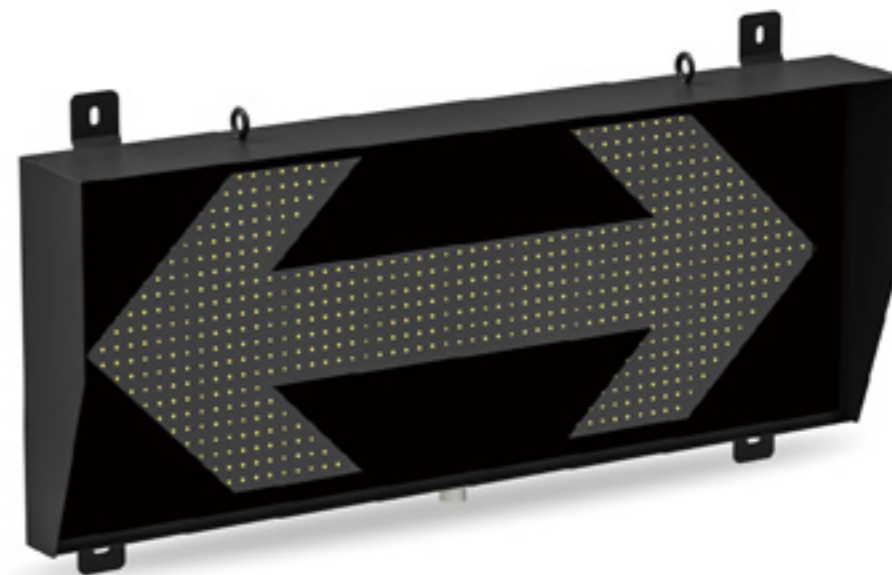


Products description and application

ABC-18 series arrow indicator adopts high brightness LED light source, specially designed as gantry moving indication for Port machinery, Engineering machinery, Hoisting machinery application.

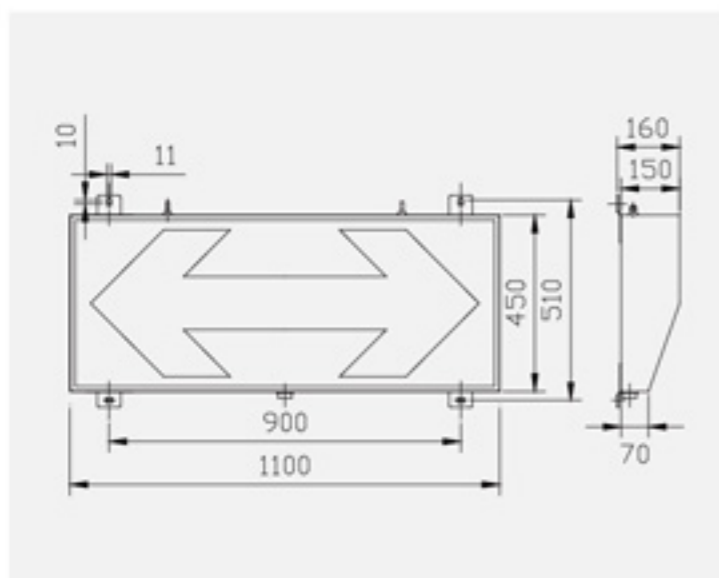
Features

- Cold rolled plate with powder coating enclosure, dustproof and waterproof, corrosion resistance and maintenance free.
- Super bright LED cluster as bulbs, providing external long life.
- Air plug (YD28KZTP) and air socket (YD28J4ZTP) as connector, ease installation and wide application.
- Adopt transparent safety glass as front panel, providing high transmittance and firmly seated.
- Two arrowhead indicators on one display, three indicator states, easy operation.



Mounting dimension

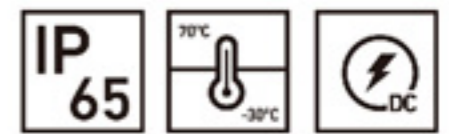
unit: mm



Specification

Rated voltage	DC18-24V/AC220-AC240V	IP rate	IP65
Rated power consumption	10-31W	Operating temperature	-30°C ~ +70°C
Operating current	0.6-1.3A	Relative humidity	10% - 95%
Lighting color	Red		(non condensing)
LEDs life time	≥100,000h	Material	Cold rolled plate+
Visual distance	≥200m		Powder coating
Lead wire	1m	Weight	32kg

Arrow Panel Display ABC-401

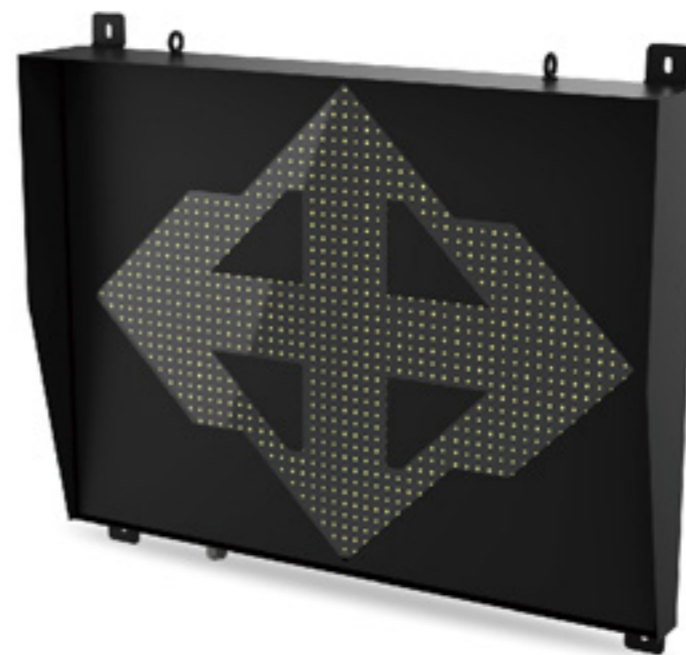


Products description and application

ABC-401 series arrow indicator adopts high brightness LED light source, specially designed as gantry moving indication for Port machinery, Engineering machinery, Hoisting machinery application.

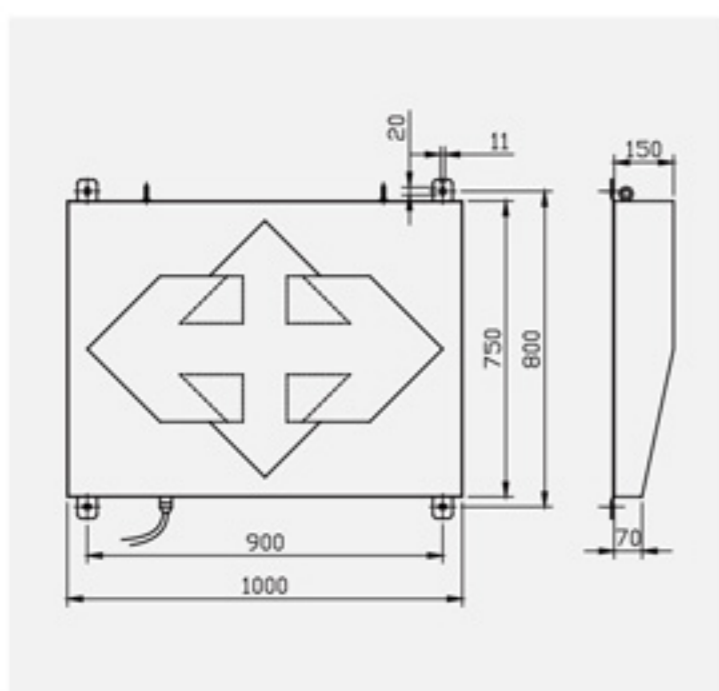
Features

- Employ stainless steel with powder coating paint finishes enclosure, providing environmental protection, corrosion resistance and maintenance free.
- Use super bright LED cluster as bulbs, providing external long life.
- Transparent safety glass as front panel, providing high transmittance and firmly sealed.
- Four arrowheads direct four states, easy to operate.



Mounting dimension

unit: mm



Specification

Rated voltage	DC24V(others can be customized)	IP rate	IP65
Rated power consumption	75W	Operating temperature	-30°C ~ +70°C
Visual distance	>200m	Relative humidity	10% ~ 95% (non condensing)
Lighting color	Red	Material	Stainless steel
LEDs life time	>100,000h	Weight	35.5kg

Industrial Signal Display LD307

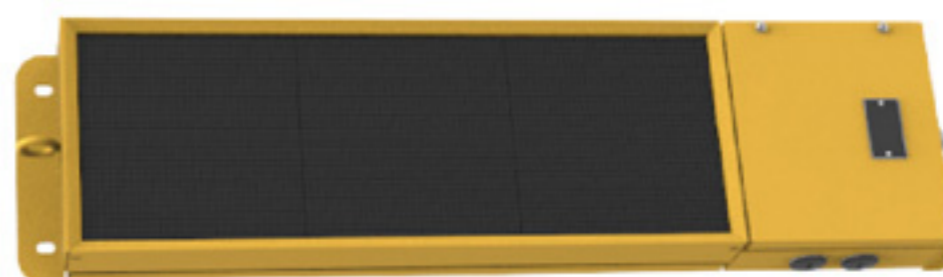


Products description and application

Using LED matrix method to show or feedback different on-site working status, the display is flexible, clear, eye-catching, intuitive, stable and reliable, low power consumption, long life time. Specially designed for heavy machinery, engineering machinery and port machinery, etc.

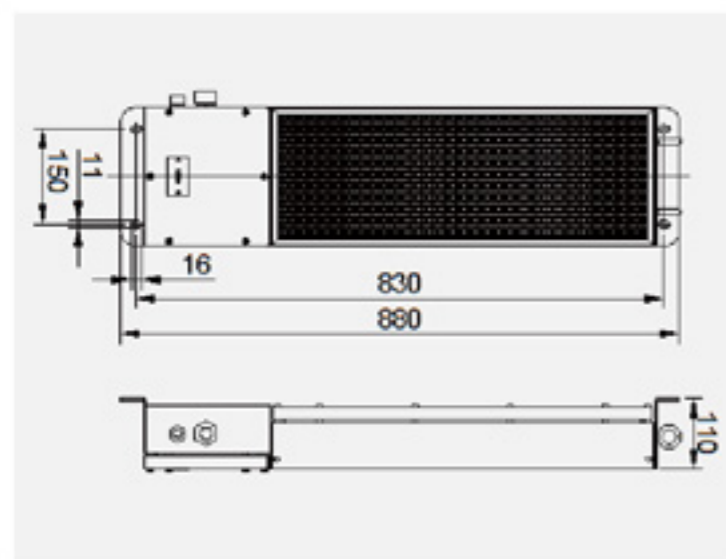
Features

- Stainless steel 304 enclosure, operate stable and durable.
- Outdoor type double color LED module, brightness, large visual angle, long visible distance, no reflection.
- Sealed structure design, dust and water proof, IP65, vibration.
- Communication mode: RS485 (Ethernet can be customized).
- 16 addresses can be remotely set by software; installation method: horizontal installation/ vertical installation can be switched.



Mounting dimension

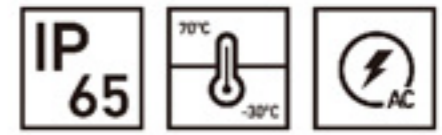
unit: mm



Specification

Rated voltage	AC100V ~ AC240V	Operating mode	Steady burning/ Flash
Frequency	50Hz~60Hz	Visual distance	>100m
Rated power consumption	<65W	Refresh frequency	>20Hz
Light source	LED	Horizontal visible angle	140±10°
LEDs life time	100,000h	Material	Stainless steel 304
Communication mode	RS485/Ethernet	Finish	Powder coating
Communication distance	≤1000M/LAN	IP rate	IEC60529 IP65
Data line	Twisted shielded cable/ network cable	Operating temperature	Ta-30°C ~ +60°C
Display color	Red/Green/Yellow	Relative humidity	10% - 95%RH
Resolution	32×32	Mount	Surface mount (Horizontal/Vertical)
Pixel pitch	6mm	Wiring	M20(Φ5-Φ10)+M20(Φ9-Φ14)/ 2-M20(Φ9-Φ14) cable gland
Vertical visible angle	130±10°	Weight	11kg
Display content	Number 0-99; Character, Arrow; Cross; Round		

Industrial Signal Display LD123



Products description and application

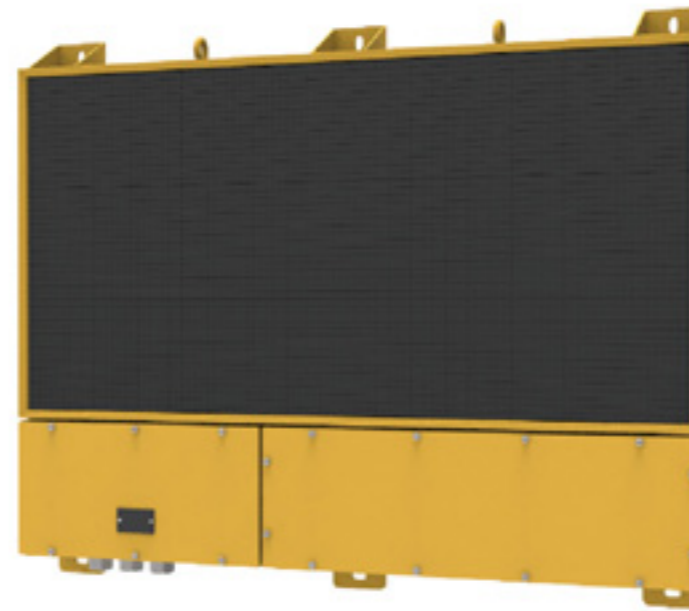
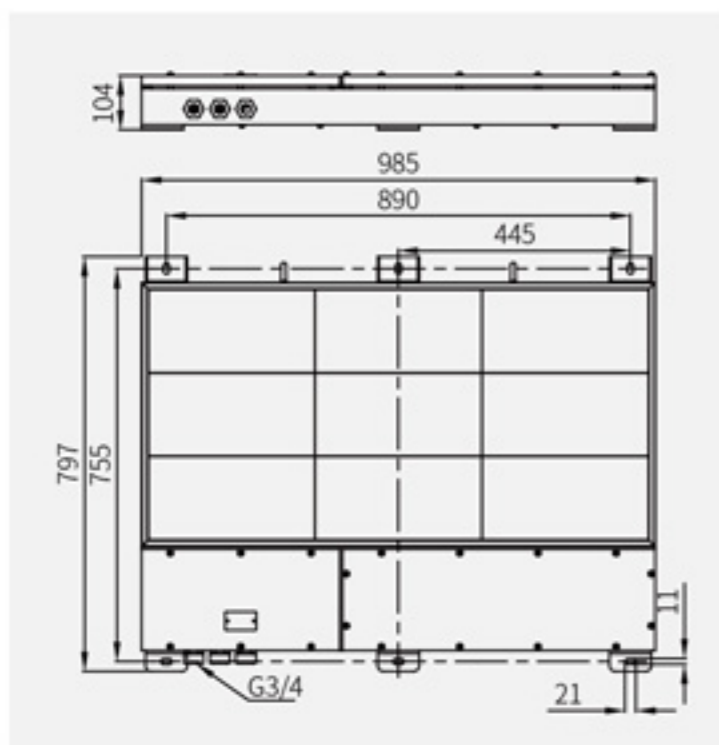
Using LED matrix method to show or feedback different on-site working status, the display is flexible, clear, eye-catching, intuitive, stable and reliable, low power consumption, long life time. Specially designed for heavy machinery, engineering machinery and port machinery, etc.

Features

- Use outdoor super bright LED module display technology, external long life, high penetration.
- Use PROFIBUS-DP communication technology, providing super strong electromagnetic compatibility and anti-interference capability.
- Stainless steel enclosure, sealed construction, providing environmental protection and shockproof, IP protection is IP65.
- Insert cables to the terminals inside the display from cable gland, easy for wiring and mounting.
- Anti-reflection design and visible angle is more than 120 degree.

Mounting dimension

unit: mm



Specification

Rated voltage	AC100V~AC240V	Operating mode	Steady burning/ Flash
Frequency	50Hz/60Hz	Visual distance	>50m
Rated power consumption	<200W	Refresh frequency	>20Hz
Light source	LED	Horizontal visible angle	140±10°
LEDs life time	>100,000h	Material	Stainless steel 316
Communication mode	PROFIBUS-DP /Ethernet	Finish	Powder coating
Communication distance	≤1000M/LAN	IP rate	IEC60529 IP65
Data line	Twisted shielded cable/ network cable	Operating temperature	Ta-30°C~+60°C
Display color	Red/Green	Relative humidity	10%~95%RH
Resolution	32×16	Mount	Surface mount
Pixel pitch	10mm	Wiring	3-G3/4(Ø13-Ø18)/ 2-G3/4(Ø13-Ø18)+
Vertical visible angle	130±10°	Display content	Number; Character; Symbol; Pattern
Display content	Number; Character; Symbol; Pattern	Weight	M20(Ø7-Ø12) cable gland 35Kg

Laser Anti-collision System AE422



Products description and application

Specially designed for the heavy machinery (overhead travelling crane, STS crane, Rail mounted gantry crane, mobile harbor crane).

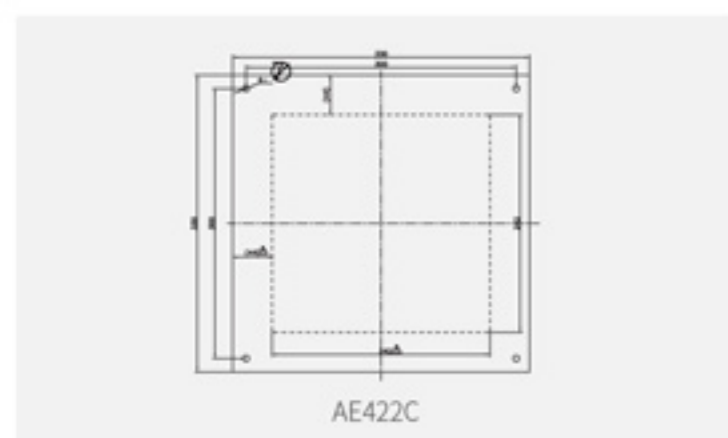
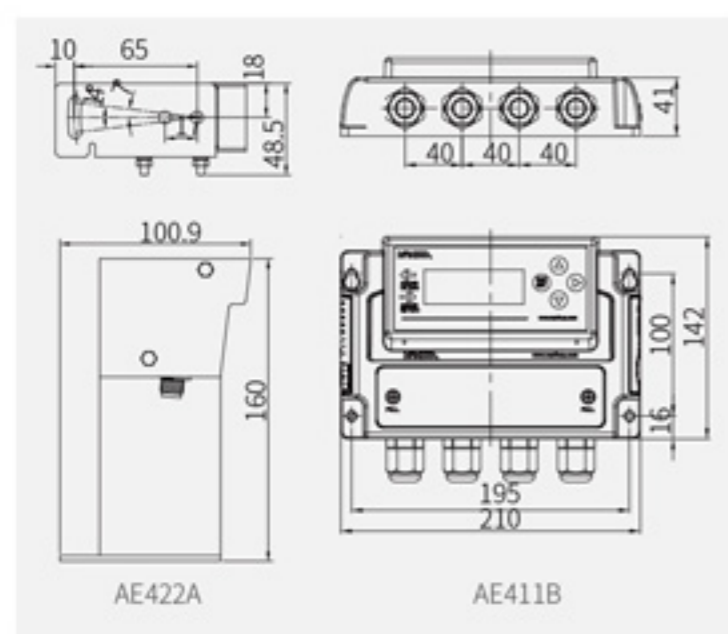
Laser complies with IEC/EN 60825-1:2014

Features

- Voice Pre-alarm and Alarm, Pre-alarm and Alarm distance can be set.
- Mini display panel.
- Compatible with 2 sets 4-20mA signal output sensors.
- Left or right direction output pre-alarm, alarm switching value signal independently (NO or NC).
- Can be connected two sensors, 4-20mA input.
- Wide voltage range: AC85~AC265V.
- Maximum measuring distance up to 50 meters.
- Laser safety level is 1 grade, safety and eye protection.

Mounting dimension

unit: mm



AE422A



AE422C



AE411B

AE422C control kit specification

Rated voltage	AC85V-AC265V	Storage temperature	-40°C ~ +75°C
Frequency	50-60Hz	Operating temperature	-30°C ~ +70°C
Rated power consumption	<10W	Relative humidity	0% - 95% (non condensing)
Range	0.2m-50m	Usage	Indoor
Tolerance	±0.1 m	Weight	0.5Kg
Action-time	0.5s	Material	ABS
Max. alarm sound level	80dB	Resolution	0.1m
Multi-signal output	Voice alarm, digital communication output (optional) Left or right direction output pre-alarm, alarm switching value signal independently (NO or NC)		
Resistance	12A 125VAC or 7A 250VAC or 7A/30VDC		
Display	Content:distance Refreshing frequency: 2 frequency per second		

AE422A sensor specification

Rated voltage	DC12-30V	Operating temperature	-30°C ~ +55°C
Output current	<100mA	IP rate	IP65
Inversion frequency	333...6Hz	Weight	0.48Kg
Signal output	4-20mA	Material	Cold rolled plate + Galvanized+Powder coated
Light source	Red color Laser	Spot diameter	15mm×15mm(at 2m)
Range	0.2m-50m (via reflector)	Size	330 x 330mm
Laser protection level	Level 1 (EN60825-1)		
Storage temperature	-40°C~ +75°C		

Low Intensity Type A/ Type B Aviation Obstruction Light LS810



Products description and application

Specially designed for heavy machinery (Engineering machinery, Port machinery, Mining machinery), Metallurgies, Towers (Telecom, GSM), Smokestacks, Buildings and any other potentially hazardous obstructions to air traffic with a steady burning red safety light.

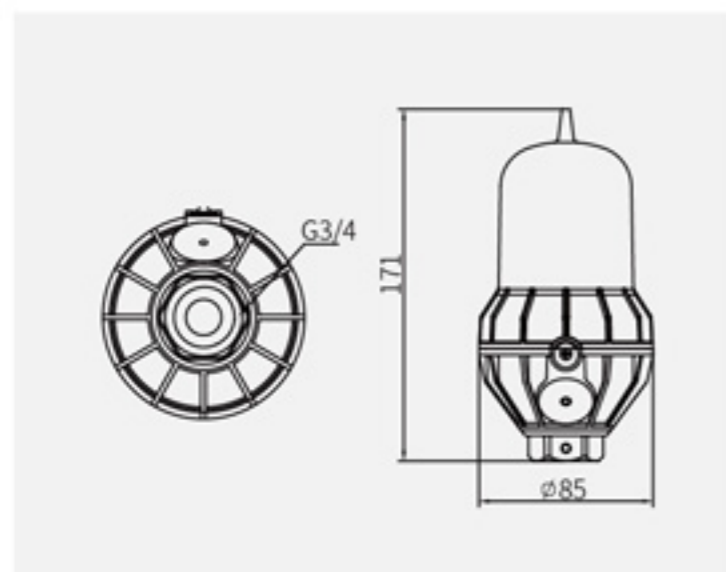
Inatallation height: less than 45 meters according to ICAO FAA CAAC regulation.

Features

- Based on LED technology, low power consumption, and high efficiency.
- Lamp housing – Polycarbonate, with good anti-impact strength, thermal stability, high transmittance.
- Die-cast aluminum enclosure with powder-coat paint finishes, providing corrosion resistance and durability.
- Ease of mount, come with safety wire
- EMC Compliance, No RF Radiation.
- Self-contained compartment, with stainless steel wire which is used to secure the unit against falling in operation, and ease of mount.
- Built-in photocell can switch ON/OFF the light at dawn and dusk (optional).
- Extremely Reliable – Major Maintenance Cost Saving.
- External two M20X1.5 Waterproof gland(can be customized).

Mounting dimension

unit: mm



Specification

Rated voltage	AC110V-AC240V&DC48V/ DC12-DC24V	Operating mode	30FPM/ 40FPM/ 60FPM/ Steady burning(Default
Rated power consumption	4W (Steady burning)		Steady burning)
Light source	LED	Relative humidity	10%-95%RH
Electrostatic discharge	MH6012-2015	Operating temperature	Ta-40 °C ~ +55 °C
	Contact discharge 8kV	IP rate	IP66
On/off level	500 lux	Wiring	G3/4" via Bottom
Intensity	Type A: ≥10cd Type B: ≥32.5cd	Body Material	Aluminum alloy
		Light cover material	PC
Vertical degree	≥10°	Body color	Red/ Yellow
Horizontal degree	Horizontal 360°	Weight	0.3 kg
Lighting color	Red		

Dual Low Intensity Aviation Obstruction Light LS810D



Products description and application

Specially designed for heavy machinery (Engineering machinery, Port machinery, Mining machinery), Metallurgies, Towers (Telecom, GSM), Smokestacks, Buildings and any other potentially hazardous obstructions to air traffic with a steady burning red safety light.

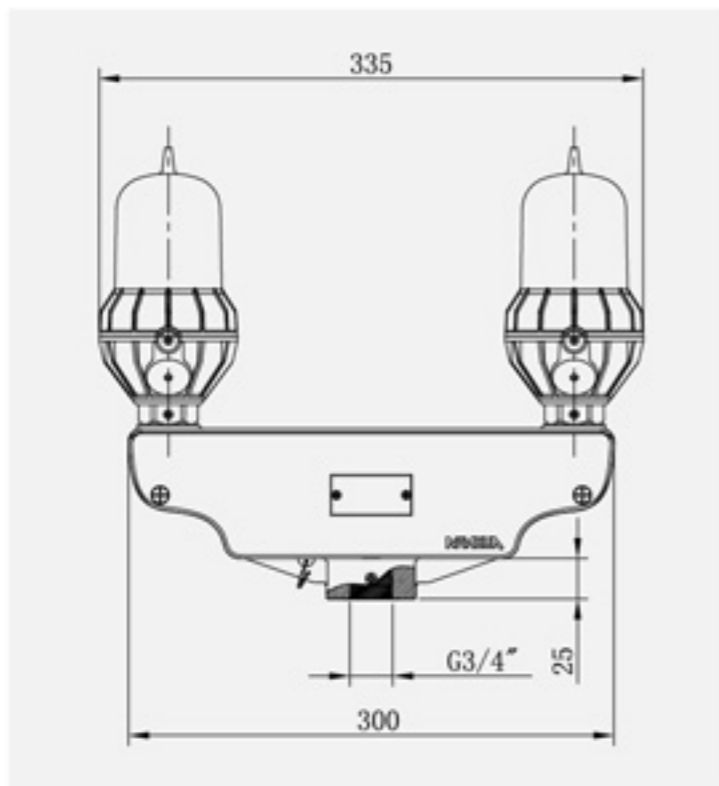
Inatallation height: less than 45 meters according to ICAO FAA CAAC regulation.

Features

- Aluminum alloy die-cast shell, electrostatic powder spraying on surface, vibration resistance, corrosion resistance.
- Red appearance (yellow color is optional).
- Use UV resistant, shock resistant PC lampshade.
- Compliant to ICAO (Annex No. 14) Low intensity standard and FAA-L810 type.
- Based on LED technology, low power consumption, and high efficiency.
- Dual light operating separately (when main light is in failure, another light start operating, this function can be customized).
- Photocell control function(can be customized).photocell level 500lux.
- G3/4" pipe is available for installation, easy for mounting.

Mounting dimension

unit: mm



Specification

Rated voltage	AC110V-240V/DC48V/ DC12V-DC24V	Horizontal degree	Horizontal 360°
Rated power consumption	4W (Steady burning)	Body material	Aluminum alloy
Light source	LED	Light cover material	PC
Electrostatic discharge	MH6012-4-2 Contact discharge 8kV	UV resistant	UL746C (f1)
On/off level	500±50 lux	Relative humidity	10%-95%RHP
Intensity	≥32.5cd	Operating temperature	Ta-40 °C ~ +70 °C
Vertical degree	≥10°	IP rate	IP65
Lighting color	Red	Body color	Red/ Yellow
Operating mode	30FPM/ 40FPM/ 60FPM/ Steady burning (Default Steady burning)/ Duty and standby light	Weight	2.3 kg

Solar Aviation Obstruction Light LT101



Products description and application

Specially designed for heavy machinery (Engineering machinery, Port machinery, Mining machinery), Metallurgies, Towers (Telecom, GSM), Smokestacks, Buildings and any other potentially hazardous obstructions to air traffic with a steady burning red safety light.

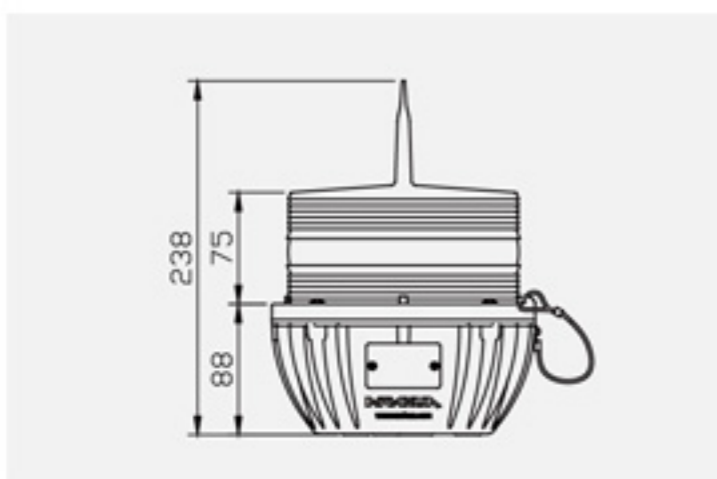
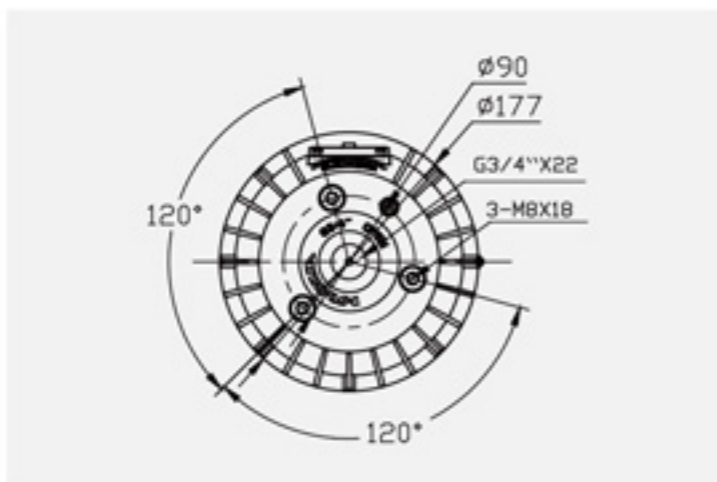
Inatallation height: less than 45 meters according to ICAO FAA CAAC regulation.

Features

- Die-cast aluminum body with powder coating, UV resistant PC light cover, comes with bird spike.
- LED light source, life time up to 100,000 hours.
- Built-in photocell.
- Comes with safety wire.
- Built in NiMH battery, ease for replacement.
- No RF-radiations, EMC Compliant.
- Shock and corrosion resistance.

Mounting dimension

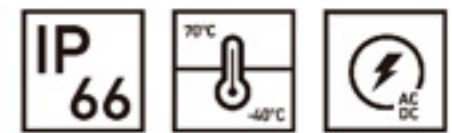
unit: mm



Specification

Solar cell	1.8W Monocrystalline silicon solar cell	Operating mode	30FPM/ 40FPM/ 60FPM
Battery capacity	3.6V/8AH (Maintenance-free) NiMH	Light source	LED
Continuous operation in rainy time	20 days	Electrostatic discharge	MH6012-4-2 Contact discharge 8kV
Battery storage protection	On/Off switch at the bottom (see product manual)	Body material	Aluminum alloy
Intensity	>10cd	Light cover material	PC
Vertical degree	≥10°	UV resistant	UL746C (f1)
Horizontal degree	Horizontal 360°	Relative humidity	10%-95%RH
Lighting color	Red	Operating temperature	Ta-30 °C ~ +70 °C
		IP rate	IP65
		Body color	Yellow
		Weight	2.3 kg

Medium Intensity Type A Aviation Light LM101



Products description and application

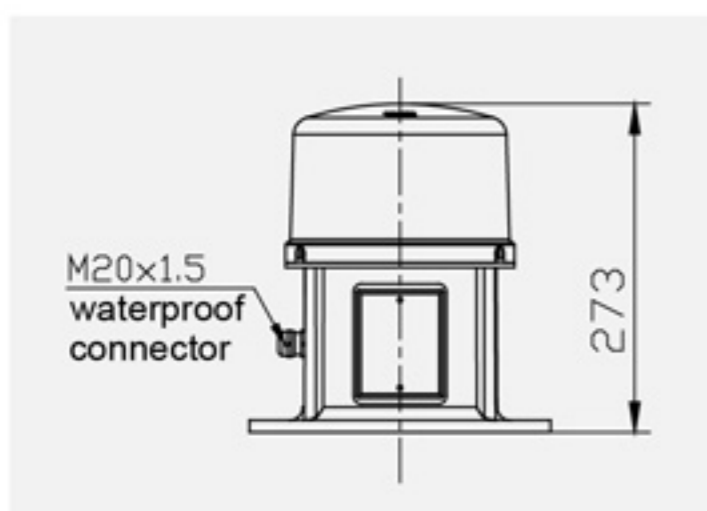
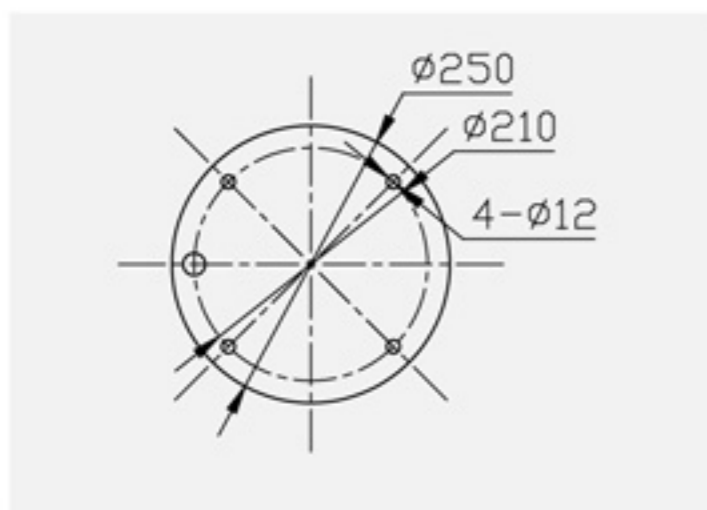
LM101 Medium intensity obstruction light for marking Towers (Telecom, GSM), Smokestacks (heat-engine plant, coking plant, chemical plant etc), Buildings, Port devise, Construction machinery, wind power generator etc for air traffic warning. Inatallation height: less than 45 meters according to ICAO FAA CAAC regulation.

Features

- Based on LED technology, and meeting optics standard.
- uilt-in circuit protect LED, extremely reliable and cost saving.
- Shockproof and corrosion resistant.
- Reflector: ABS material and vacuum plating.
- Combustibility rating: UL94-V0.

Mounting dimension

unit: mm



Specification

Light source	LED	IP Protection	IP65
Color	Red/White	Vertical degree	3° Min
Supply voltage	DC48V/AC110-240V(other voltage can be customized)	Horizontal degree	360°
Power consumption	30W (Steady) / 6W (30 FPM)	Flashing rate	30FPM (20-60times mincustomizable)
Intensity	2000±25 % cd	Flashing duration	150±20ms
Ambient temperature	-40°C ~ +70°C	LED life	≥80,000h
Humidity	10% ~ 95% (no coagulation)	On/Off level	50Lux
Material	Base: Aluminum alloy, Reflector: ABS, vacuum plating	Weight	4.5kg

Medium Intensity Type A Aviation Light LM403



Products description and application

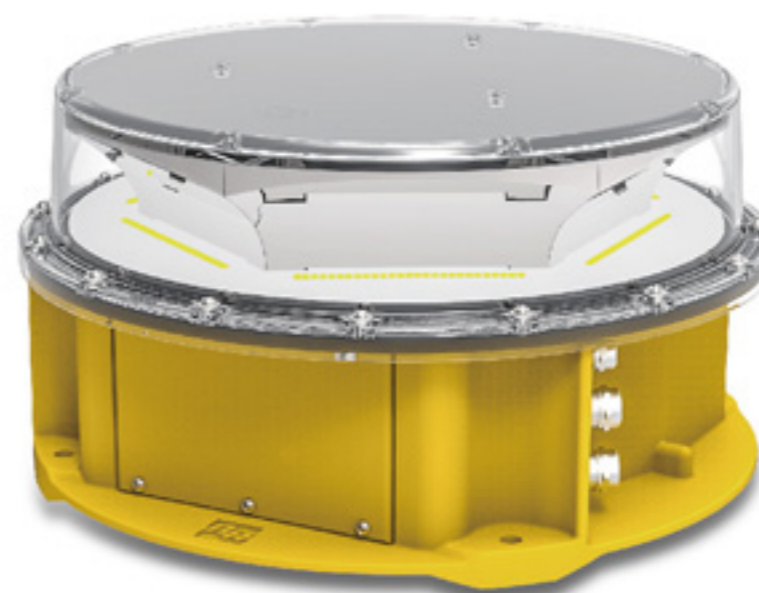
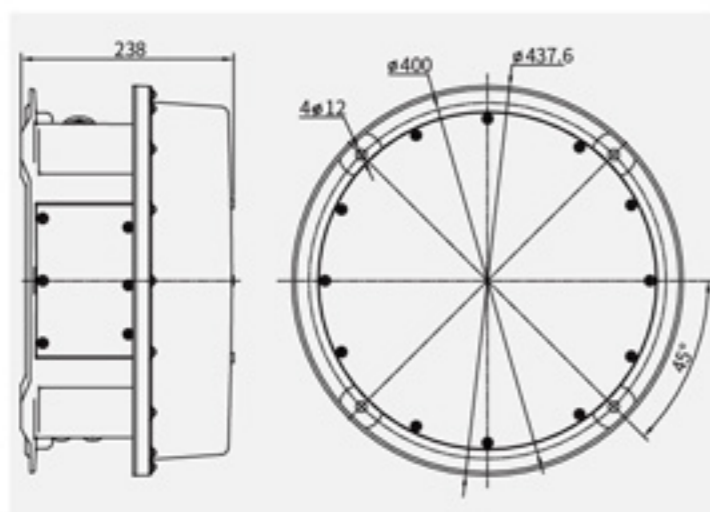
LM403 Medium intensity aviation light Type A&B is specially designed for heavy machinery (Engineering machinery, Port machinery, Mining machinery), Metallurgies, Towers (Telecom, GSM), Smokestacks, Buildings and any other potentially hazardous obstructions to air traffic. Suitable for the installation height from 105 meters to 150 meters. Inatallation height: less than 45 meters according to ICAO FAA CAAC regulation.

Features

- Aluminum alloy die-cast enclosure with electrostatic powder spray, corrosion resistant and vibration resistant.
- UV resistant and shockproof PC light cover, flammable level: UL94V-2.
- LED light source, Long life time and low power consumption.
- Electromagnetic interference resistant.
- Wind resistant rating: ≥ 240 Km/H.
- Local timing setting control pr photocell control as priority for day to nigh switch option.
- Comes with fault alarm detecion and fault alarm output function.
- Come with synchronization function (via GPS).

Mounting dimension

unit: mm



Specification

Rated voltage	AC110V/ AC220V /DC48V	Intensity	Daytime/twilight:
Fault alarm	Dry contact (No or NC)		20000 \pm 25%cd;
Power consumption	Daytime: 45W(at 40FPM)		Night:2000 \pm 25%cd
Lightning surge	IEC61000-4-5 L- L 3kV ,	Storage temperature	Ta-40°C ~ +70°C
	IEC61000-4-5 L-G 6kV	Operating temperature	Ta-40 °C ~ +55°C
Electrostatic discharge	MH6012-4-2 Contact discharge 8kV	Relative humidity	0% ~ 90% RH
Light source	LED		(non condensing)
Operating mode	Flash	IP rate	IP66
Flash rate	Daytime/twilight: 20/30/40 FPM;	Weight	18.2kg
	Night:20/30/40/60FPM,steady	Lighting color	White or White+Red
	burning(red); (default 40 FPM)	LEDs life time	$\geq 100,000$ h
Flash duration	White color at Daytime/twilight: 95ms;	Horizontal degree	360°
	White color at night: 150ms;	Vertical degree	$\geq 3^\circ$
	Red color at night: 670ms	On/off level	50-500lux

Wind Sensor FA13/FA132



Products description and application

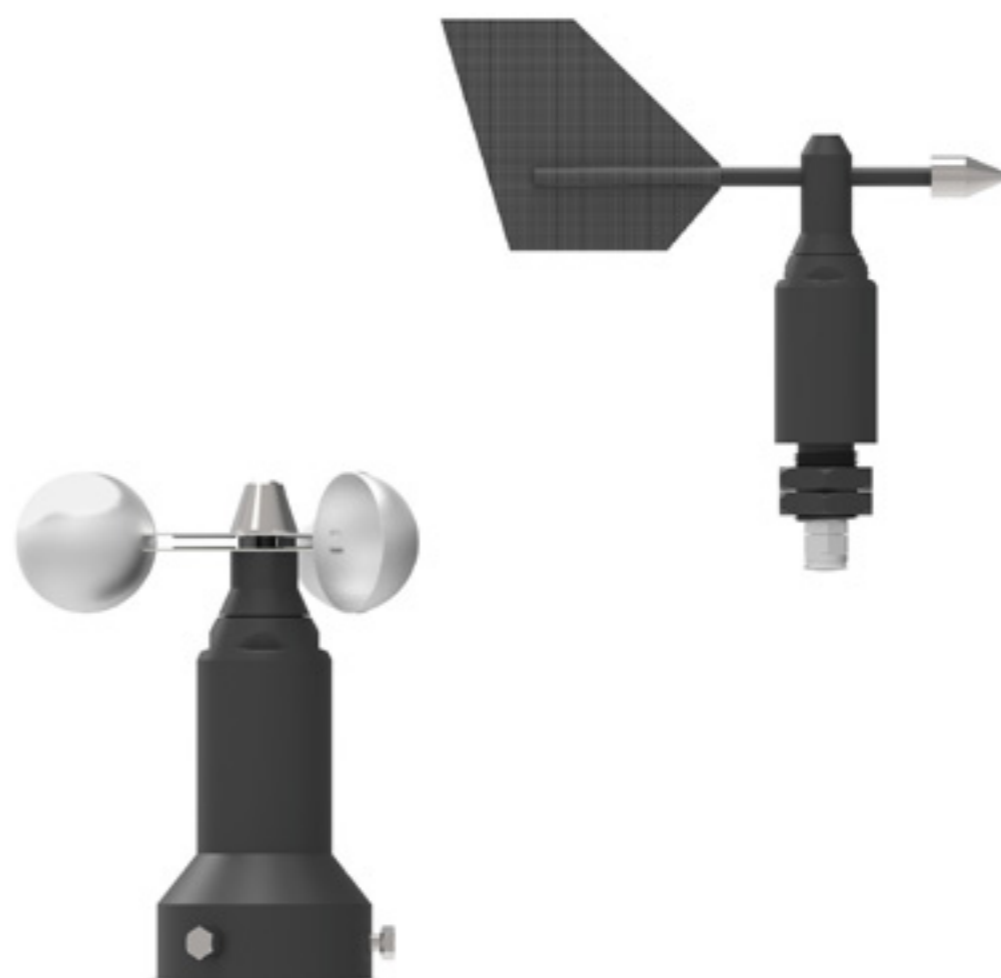
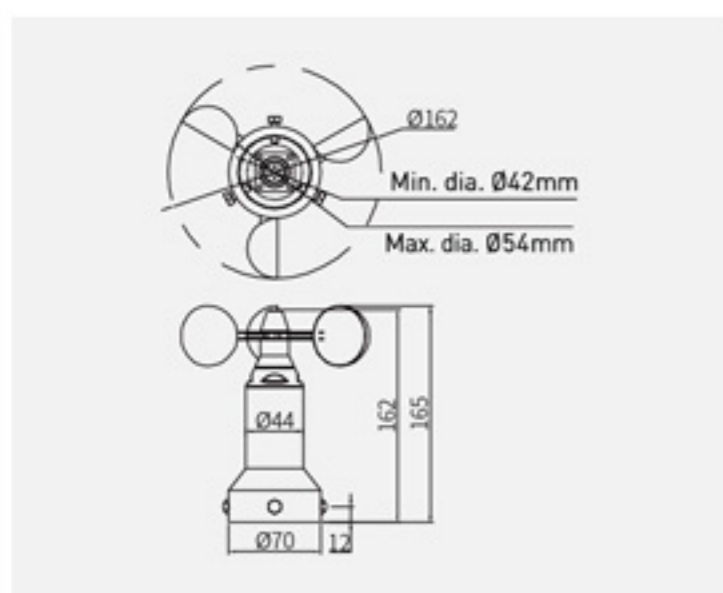
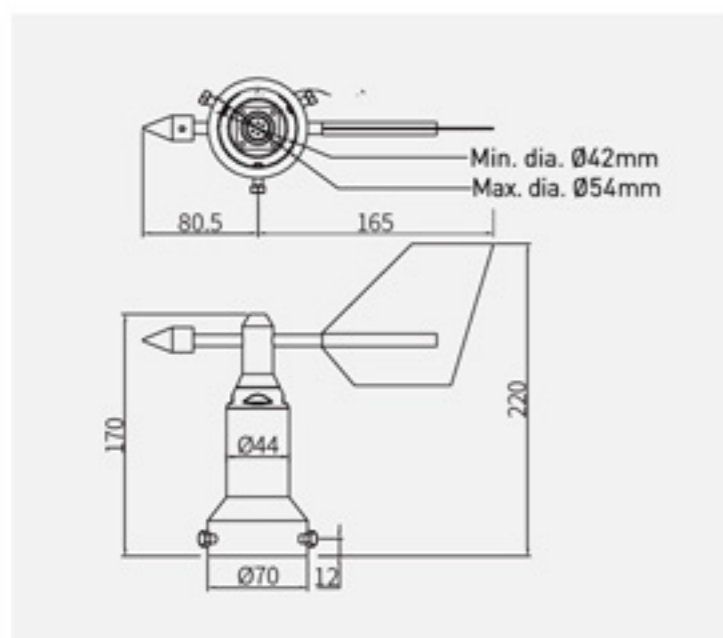
Specially designed for industrial application. Product has built-in anti radio frequency, anti-EMI and lightning surge protection circuit. Application: wind monitoring and wind data collection for engineering machinery, container cranes, Meteorological , power plants, traffic, etc.

Features

- Adopt non-contact magnetic measuring technology.
- High accuracy, high reliability.
- Wide wind measuring range, low starting threshold.
- Metal housing, excellent corrosion resistant design, high anti-wind level.
- Compact design, include wind speed measuring and heating, ease to mount and maintain on site.
- Multistage lightning surge protection design.
- Wide voltage design.

Mounting dimension

unit: mm



Specification

Rated voltage	DC5V-30V	Resolution	0.1m/s 0.35°
Operating current	Max. 50mA	Body material	Aluminum alloy
Heating voltage	DC18V-30V	Wind van material	Carbon fibre +SUS304
Heating power	≤50W	Wind cup material	SUS304
Heating mode	PTC auto heating	Bearing material	SUS404C
Lightning surge	IEC 61000-4-5 4kV /2kA	Relative humidity	0%-100%RH
Electrostatic	IEC 61000-4-2 Air discharge 16kV	Operating temperature	Ta -40℃ ~ +70℃
discharge	IEC 61000-4-2 Contact discharge 8kV	IP rate	IEC 60529 IP65
Starting threshold	≤0.5m/s Vu=20 ℃	Wiring	Aviation plug
Anti-wind level	>70m/s	Body color	Black RAL9005
Range	FA13:0-70m/s ; FA132:0°-360°	Weight	0.6 kg
Accuracy	FA13:±0.5m/s (VL<5m/s) ±3% (VL>5m/s)		
	FA132:±2°		

Wind Sensor FA01/02



Products description and application

This product is an economic type maintenance free wind sensor. Product adopts compact design, has light weight, low power consumption, low starting threshold, various signal output for option.

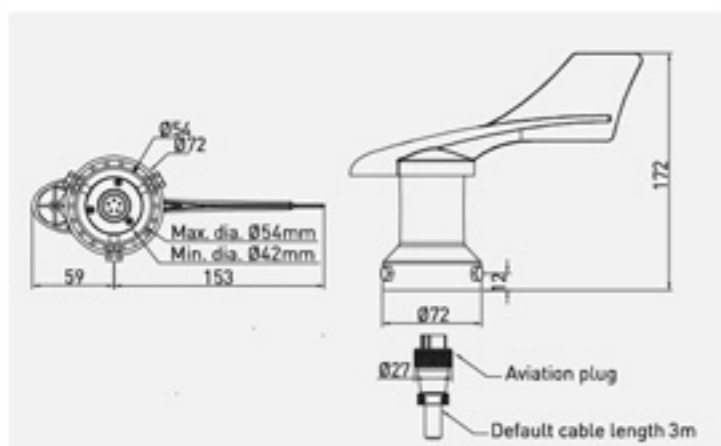
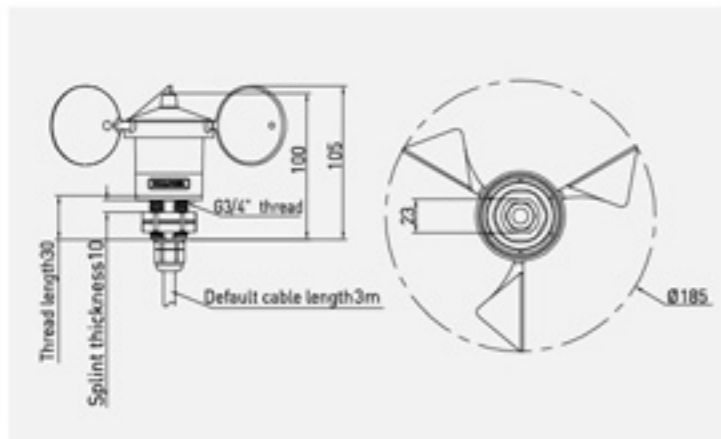
Application: wind monitoring and wind data collection for engineering machinery, container cranes, mines, power plants, etc.

Features

- Adopt non-contact magnetic measuring technology, high anti-interference ability and reliability.
- Wide wind measuring range, low starting threshold.
- Wind cup and housing adopts maze structure connection design.
- Modular design, ease to mount and maintain on site, suit to various industries and application.
- Fault tolerant design, product not damage in wrong wiring connection.
- Multistage lightning surge design.
- Wide voltage design.

Mounting dimension

unit: mm



Specification

Rated voltage	DC5V-30V	Resolution	FA01:0.1m/s FA02:1°
Operating current	Max. 35mA	Body material	PC+ABS
Lightning surge	IEC61000-4-5 4kV /2kA	Wind cup material	PC+ABS
Electrostatic discharge	IEC 61000-4-2 Air discharge 16kV IEC 61000-4-2 Contact discharge 8kV	Bearing material	SUS404C
Starting threshold	≤0.5m/s Vu=20℃	Relative humidity	0%-100%RH
Body color	Black RAL9005	Operating temperature	Ta -40℃ ~ +70℃
Range	FA01:0-60m/s FA02: 0°-360°	IP rate	IEC60529 IP65
Accuracy	FA01:±0.5m/s (VL<5m/s) ±3% (VL>5m/s) FA02:±2°	Anti-wind level	>70m/s
		Wiring	Aviation plug
		Weight	FA01:0.2 kg FA02:0.3 kg

Ultrasonic Wind Sensor FAR



Products description and application

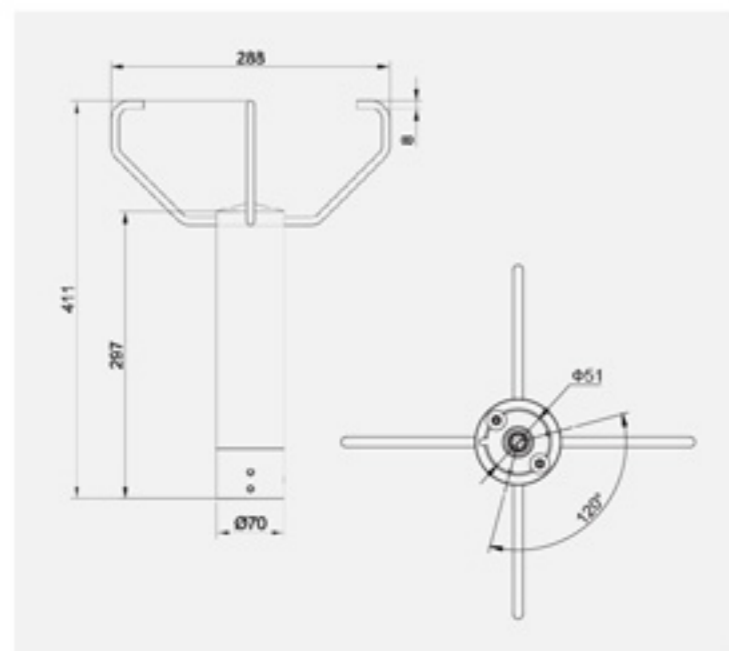
FAR wind speed sensor is a maintenance free ultrasonic sensor. Product has no moving parts and has fast dynamic response, which is suitable for gust measurement. Built-in high efficiency heating device, ensure product normal operation in harsh cold environment. Designed for wind monitoring and wind resource assessment in the fields of engineering machinery, port machinery, factories and mines, wind power, environment protection, high way and railway.

Features

- Adopt time difference measurement principle, strong capacity of environmental interference resistant
- Adopt high efficiency filtering algorithm, special compensation technology.
- design for rain, fog weathers.
- Various signal output for option.
- Multistage lightning and surge protection design.
- Power interface and signal interface full insulation design.
- Stainless steel body, corrosion resistant and high strength.

Mounting dimension

unit: mm



Specification

Rated voltage	DC24V±20%	Wind speed range	0-60m/s
Operating current	Max. 100mA	Wind speed accuracy	±0.2m/s (<10m/s)
Heating power	120W		±2% (10m/s-60m/s)
Lightning surge	IEC61000-4-5 6kV /3kA	Wind speed resolution	0.1m/s
Electrostatic discharge	IEC 61000-4-2 Air discharge 16kV	Anti-wind level	>70m/s
	IEC 61000-4-2 Contact discharge 8kV	Wind direction Range	0°-360°
Signal output	4-20mA or RS485	Wind direction accuracy	±2°
Material	Stainless steel	Wind direction resolution	1°
Relative humidity	0%-100%RH	Wiring	Aviation socket
Operating temperature	Ta-40℃ ~ +70℃	Body color	Metallic
IP rate	IEC60529 IP66	Weight	2.5 kg

Ultrasonic Wind Sensor FAR 3



Products description and application

FAR3 is a wind sensor that uses ultrasonic technology to measure wind speed and direction. It can measure wind speed and direction at the same time.

wind direction. Compact design, built-in 240W high-power heater, can separately temperature control the position of the reflective top plate and ultrasonic transducer; unique digital signal processing algorithm, can resist heavy rain, snow, low temperature, salt spray, wind sand, electromagnetic radiation, etc. environment.

It is suitable for wind speed monitoring and wind resource evaluation in the fields of ports, wind power generation, environmental protection, railways and highways.



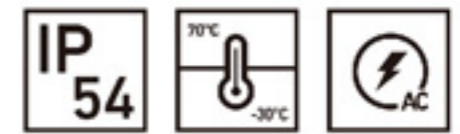
Features

- The principle of measuring wind speed and direction by using the digital improved time difference method has strong anti-environmental interference ability;
- High-power zone heating, suitable for freezing rain and severe cold environment;
- Reflective aluminum alloy shell structure, sturdy and durable, anti-corrosion;
- Using high-efficiency filtering algorithm, special compensation technology for rain and fog weather;
- Multiple signal output modes are optional;
- Multi-level lightning protection and anti-surge design;
- The power port and signal port are fully isolated.

Specification

Rated voltage	DC18-30V	Wind speed range	0-60m/s
Operating current	Max. 50mA	Wind speed accuracy	±0.2m/s (<10m/s)RMS
Heating voltage	24V DC±20%		±2% (10m/s-60m/s)RMS
Heating power	240W(DC24V)Start heating at 15℃	Wind speed resolution	0.1m/s
Electromagnetic	IEC61000-4-2	Anti-wind level	>70m/s
Compatibility	Contact discharge: ±8kV	Wind direction Range	0°-360°
	IEC61000-4-2 Air discharge: ±15kV	Wind direction accuracy	±2°
	IEC61000-4-5 wire to wire: ±4kV	Wind direction resolution	1°
	IEC61000-4-5 wire to wire: ±6kV	Wiring	Hard anodizing
	IEC 61000-4-2 Contact	Body color	Metallic
Signal output	4-20mA or RS485 ,0-0m/s,0-60°	Way out	7-pin aviation socket
Material	Aluminum alloy	Cable configuration	7-core shielded cable with
Relative humidity	0%-100%RH	Installation method	aviation plug, PW770B
Operating temperature	Ta-40℃~ +70℃		OD Φ50 tube installation
IP rate	IEC60529 IP66	Weight	1.7 kg

Wind Data Display FA130C



Products description and application

FA130C is a smart wind data display and alarm device, specially designed for large machinery. Product has unique design, durable and reliable, high interference resistant capacity, ease to mount.

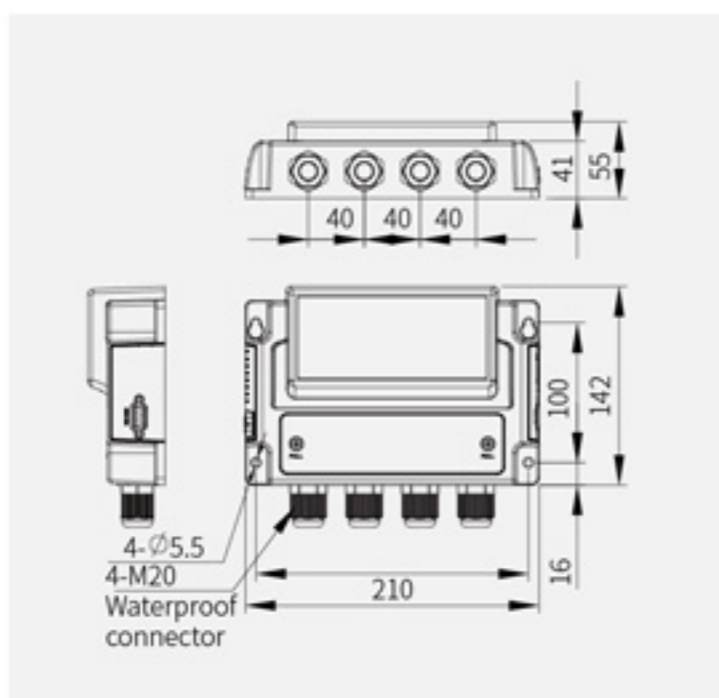
Features

- All NANHUA FA series current signal type wind sensors are compatible.
- Two-way relay alarm output, buzzer alarm, alarm point setting is available.
- Mini display panel, four digits, 16 wind direction indication, wind speed and wind scale display is switchable.
- RS485 interface, PC connection, display, logging, analysis wind data on PC by using the software (download from NANHUA website).
- 4-20mA current output, PLC connection is available.



Mounting dimension

unit: mm



Specification

Rated voltage	AC85V-AC265V	Wind speed range	0~99.9m/s
Signal input	4-20mA current	Wind speed resolution	0.1m/s
Signal output	Two-way relay alarm output (Pre-alarm - NO, Alarm - NO)	Wind direction range	0~359°
	Built-in buzzer alarm, RS485	Wind direction resolution	1°
	4~20mA current signal, linearly proportional to wind speed	Material	ABS
	Load less than 500Ω	Relative humidity	0%~100%RH
		Operating temperature	Ta -30°C ~ +70°C
Display	Wind speed display - 3 digits/ Wind direction 16 wind direction1 frequency per second	Body color	Black RAL9005
		Weight	0.5 kg

CONTROLS



VoIP Paging Intercom System DT80



Products description and application

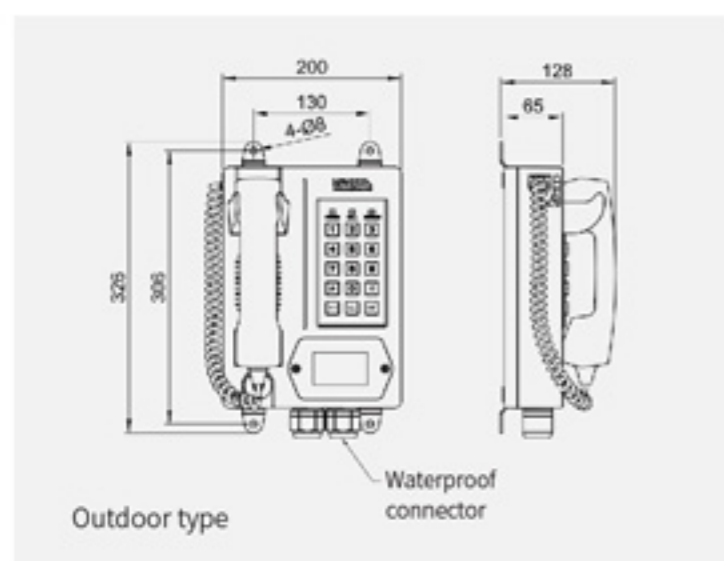
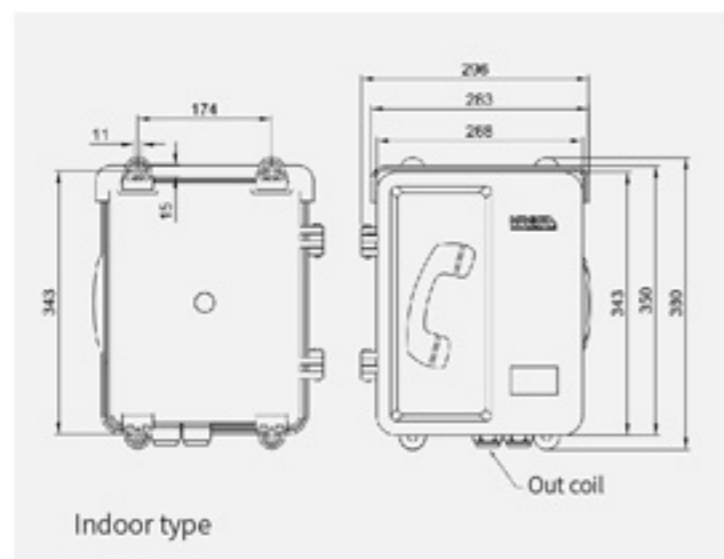
DT80VoIP paging and intercom system is digital VoIP telephone devices, adopts VoIP solution, much reliable and durable. Hand-free adopts digital duplex type, voice clear. System easy to use, low power consumption.

Features

- Support dial function, comes with warning beacon.
- Broadcasting to whole network stations via server, maintain paging function.
- Communicate with each station in the same network, long communication distance.
- Keypad has One-touch speed dial button, One-touch call all stations and Hand-free call can be set.
- Adopt SIP2.0, standard IP communication protocol
- Interface using Fibre-optic/Network cable, communication distance up to 20Km.
- External connect two 25W loudspeaker is available.

Mounting dimension

unit: mm



DT801



DT802



IPPBX



DT803



DT812



Industrial Ethernet Switch

Specification

Communication protocol	RCP/RTCP/S RTP	Speaker	One (XH2.54 needle)
Protocol	RTP	External loudspeaker box	Two (3.96mm needle)
CODEC	G.729、 G.723、 G.711、 G.722、 G.726	Power supply	DC24V or AC220V
Amplifier	2.4W	Recommended cable	2 x 1.5mm ²
Volume	Adjustable	Operating temperature	-40°C to 70°C
Full Duplex Service	Support (AEC)	Relative humidity	10% -95%
DSS button	Two or Three	Storage temperature	-40°C - 80°C
Indicator	Three	Dimension	225x130x47mm (Indoor type) 186x111x38.5mm (Outdoor type)
Microphone	One (XH2.54 needle)		

Terminal Access Control System FS series

Hardware

Products description and application

FS01 crane access control system contains Identification, permission setting, access control, remote control, remote update functions. Applied for Ports, Machinery, Metallurgy, Chemical plants, Warehouse, etc.

Features

- Easy networking, system adopts Ethernet technology, flexible networking onsite.
- Machineries operating status be displayed on central control room server.
- Using industrial computer, running WINDWOS system, ease to operate.
- LED signal display, 30 meters visual distance.
- Ask, Answer, Permit management principle, convenient for personnel management.
- Software and program can be remote updated.

FS017 Emergency exit button



Rated current	10A	Button relay	two NC
Material	PC	IP rate	IP65
Button type	Self-locking	Mounting dimension	450*492*212 (mm)
Product dimension	130*80*75 (mm)		

FS013D Power supply box



Input voltage	AC100~AC240V	Output voltage	DC12V and AC100~240V
Frequency	50/60HZ	Power	<100W
Operating temperature	-20℃~+55℃	consumption	
Material	SUS 304 with powder coating	IP rate	IP65
Weight	20kg	Dimension	522.4*421.4*230.7(mm)
Communication type	RS485, RJ45 Ethernet, Fiber optic interface		

FS011F Face recognition equipment



Operating system	Linux on embedded operating systems	Power consumption	≤15W
Screen	7 inch	Relative humidity	0%~90%
Aspect Ratio	16: 9	Operatingtemperature	-30℃~+60℃
Pixel	1020*600	IP rate	IP65
Power	DC12V/3A (no power supply)	Mounting type	Standard metal mounting plate

Terminal Access Control System FS series

FS013C E-room Access control equipment



Voltage	AC100~AC240V	Power consumption	<20W
Operating temperature	-20℃~+55℃	Relative humidity	10~90%RH
Material	SUS 304 with powder coating	IP rate	IP65
Weight	10kg	Dimension	450*492*212
Optional accessories	FS016A electronic lock, FS011C card reader, Exit button		
Communication type	RS485, RJ45 Ethernet/Fiber optic interface		

FS011D Access control equipment



Voltage	DC12V	Power consumption	<20W
Card type	IC card(13.56MHz)	Card reading distance	0~6cm
Operating temperature	-20℃~+55℃	Relative humidity	10~90%RH
Material	SUS 304 with powder coating	IP rate	IP65
Weight	12 kg	Dimension	363*451.2*179.5
Communication type	RS485, RS232, RJ45 Ethernet		

LD307 Display



Voltage	AC100V~AC240V	Material	SUS304
Frequency	50Hz/60Hz	Color	Yellow or Black
Power consumption	<65W	IP rate	IP65
Light source	LED	Operating temperature	-30℃~+60℃
Lifetime of light source	100,000h	Relative humidity	10%~95%RH
Communication type	RS485	Mounting type	Flat mount

Starlight ICR day/night camera



Communication interface	one RJ45 10M/100M/1000M self-adaptive Ethernet port		
Video output	1Vp-p Composite Output(75Ω/BNC)		
Audio	1 input (line in)/output		
Communication Interface	1 RS485	Supply	DC12V±20% / PoE(802.3at)
Operating temperature	-30℃~+60℃	Power interface type	three-core terminal block
IP rate	IP67	White distance	80m(2.8-12mm lens 20-50m)

Power Charging Cabinet ZD204



Products description and application

Designed as charging equipment for rechargeable battery of port machinery (Quay cranes, Yard cranes), special for charging battery of diesel engine.

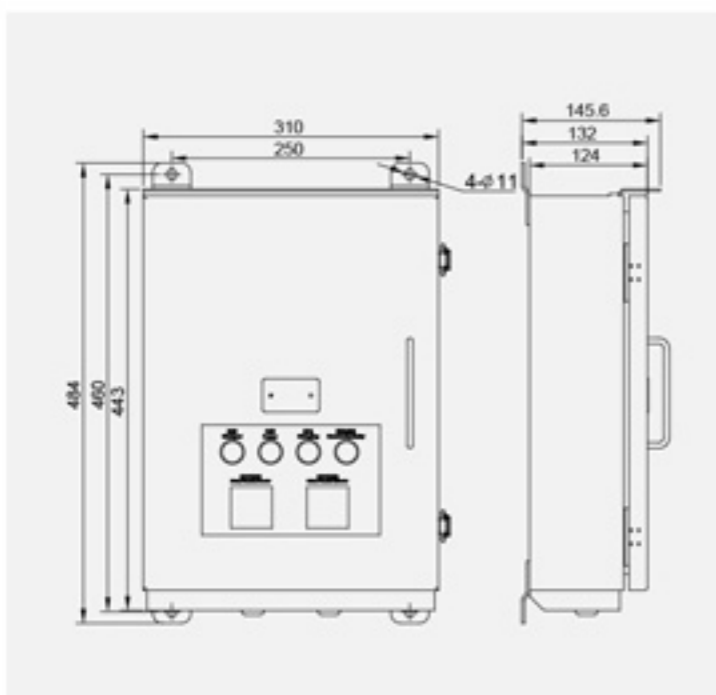
Features

- High frequency PWM Pulse Width Modulation technology.
- Three stage automatic charging process, constant voltage charging, constant current charging, float charging.
- Modular design, easy maintenance.
- Over temperature protection and over current protection.
- Lightening surge protection and short circuit protection.
- Reverse connect protection.



Mounting dimension

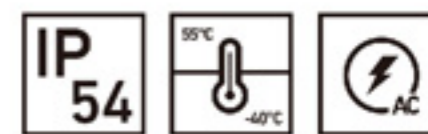
unit: mm



Specification

Rated voltage	AC110V-AC120V/AC220V-AC240V/AC460V	Body color	Grey RAL7038
Output current	DC24V/20A (suit for 24V/200AH battery)	Operating temperature	Ta-30 °C ~+70 °C
Frequency	50Hz-60Hz	IP rate	IEC60529 IP54
Relative humidity	10% - 95% RH (non condensing)	Weight	11.4kg
Body material	Cold rolled plate with powder coating		

Power Supply Cabinet ZD401



Products description and application

Designed as power supply cabinet for the products which required power supply, applied for heavy machinery (Engineering machinery, Port machinery, Mining machinery), Metallurgies, Towers (Telecom, GSM), Smokestacks, Buildings.

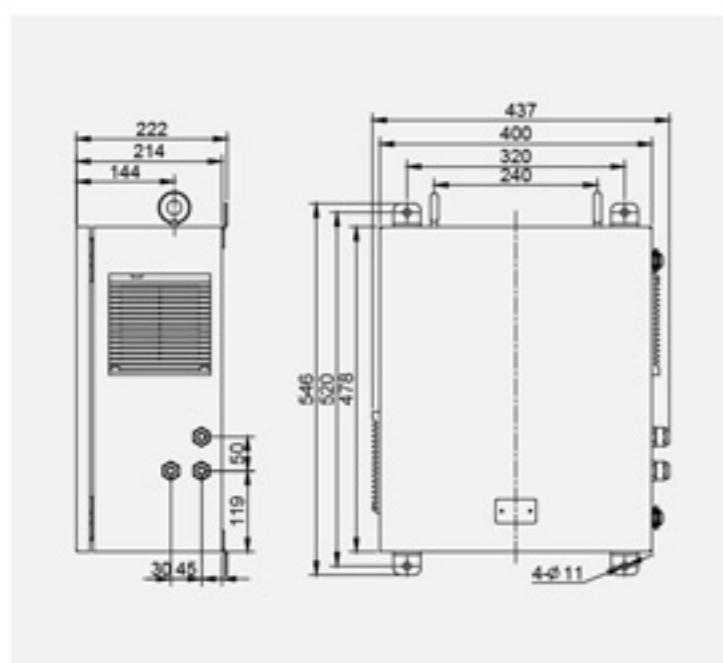
Features

- Industry standard design, fully adapt to the harsh industrial environment.
- A variety of protection type design: output short circuit / over current / overvoltage protection.
- Built-in UPS, the main power failure, immediately switch to battery power, to achieve uninterrupted power supply.
- Power status indication.
- Efficiency up to 86%.



Mounting dimension

unit: mm



Specification

Input voltage	AC200V-AC240V	Electrostatic discharge	IEC61000-4-2 Air discharge 4kV
Output voltage	DC48V/DC24V/AC220V		IEC61000-4-2 Contact discharge 8kV
Frequency	50Hz/60Hz	EMC	SAE Class 2
Max. power	500W	Body material	Cold rolled plate with powder coating
Battery capacity	DC48V/7AH DC24V/7AH 12AH, 24AH (optional)	Storage temperature	Ta-40℃ ~+60℃
Lightning surge	IEC61000-4-5 L-L 3kV IEC61000-4-5 L-G 6kV	Operating temperature	Ta-40℃ ~+55℃
Body color	Grey RAL7038	IP rate	IEC60529 IP54
		Weight	20kg

Warranty terms

• Limited warranty

This Warranty for the Nanhua Electronics Device (the "Device") is provided by the entity set forth in the table below. The provider of this warranty is sometimes referred to herein as "we".

We warrant the Device against defects in materials and workmanship under ordinary consumer use for one year from the date of original retail purchase. During this warranty period, if a defect arises in the Device, and you follow the instructions for returning the Device, we will, at our option, to the extent permitted by law, either (i) repair the Device using either new or refurbished parts, (ii) replace the Device with a new or refurbished Device that is equivalent to the Device that is to be replaced, or (iii) refund to you all or parts of the purchase price of the Device. This limited warranty applies, to the extent permitted by law, to any repair, replacement part or replacement device for the remainder of the original warranty period or for ninety days, whichever period is longer. All replaced parts and Devices for which a refund is given shall become our property. This limited warranty applies only to hardware components of the Device that are not subject to accident, misuse, neglect, fire or other external causes, alterations, repair or commercial use.

Instructions. For specific instructions about how to obtain warranty service for your Device, please contact Customer Service using the contact information provided below. In general, you will need to deliver your Device in either its original packaging or in equally protective packaging to the address specified by Customer Service. Before you deliver your Device for warranty service, it is your responsibility to back up any data, software, or other materials you may have stored or preserved on your Device. It is possible that such data, software or other materials will be lost or reformatted during service, and we will not be responsible for any such damage or loss.

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This limited warranty gives you specific rights. You may have additional rights under applicable law, and this limited warranty does not affect such rights.

If you purchased your device from	This Warranty is provided by
Shanghai NANHUA Electronics Co., Ltd. or authorized resellers located in China	NANHUA Electronics Co., Ltd. Bldg. 9, 1755 Wenbei road, Shanghai 201802 China

• Warranty Card

Applicable law stipulates Three Guarantees. We conduct warranty service in accordance with the laws and regulations of the People's Republic of China.

Service Description :

- When we serve you, please show your valid purchase invoice and product warranty card; if you cannot provide the proof above, the free warranty period of the product will be start from the factory date that postponed 90 days shown on the code.
- Within 7 days of receiving the product , if the product has not been used or if it is not artificially damaged, you can choose to refund according to the invoice price or replace the same model with the same specification. Customized products are not included in this service.
- 8-15 (including 15th) days after the customer receives the product, if the product has not been used, or if the product has not been damaged by human performance, you can choose to replace the same product, or choose to repair. Customized products are not included in this service.
- During the free warranty period, the product must be tested by Nanhua Electronics. After confirming the fault, Nanhua Electronics may, at its option, replace, repair product, or adopt other means to provide you the warranty service promised in this document. All the replaced parts are owned by Nanhua Electronics Co., Ltd.; for the detection of non-faulty products, they will be returned to you.
- Nanhua Electronics does not bear the cost and risk of customers' delivery of products.
- If the product does not meet the warranty requirements, the customer needs to pay for maintenance.

One of the following conditions is not covered by the warranty:

- Out of warranty.
- Damage due to force majeure such as earthquake, fire, typhoon, flood, etc.
- The product nameplate is torn or damaged, blurred and unrecognizable.
- Human behavior leads to product damage, such as improper voltage input, unauthorized disassembly, mechanical damage, severe oxidization of the product, or burn-out of printed circuit boards.

Note: The right of final interpretation and modification of this warranty card is owned by Nanhua Electronics Co., Ltd.

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