POWER ELECTRICAL

Product Catalogue

Introduction

Power Electrical Trading LLC is a specialist supplier of industrial and Oil and Gas electrical and lighting solutions, offering a high-performance products for demanding commercial, industrial, and hazardous environments. Our portfolio includes industrial lighting fixtures (including industrial highbay LED), Ex (explosion-proof) electrical products and lighting, EX junction boxes and control panels, EX air conditioning solutions, and a wide range of other industrial electrical components.

Our mission is to deliver the right products, at the right time, and at the right cost — minimizing risk for our customers and building long term relationships — by supplying robust, compliant, and energy efficient electrical and lighting solutions that maximize operational uptime, reduce lifecycle costs, and meet the strict safety and performance requirements of industrial environments.

Why choose Power Electrical Trading LLC

- Industry-focused portfolio: Curated product lines for warehouses, manufacturing plants, cold storage, hazardous areas (oil & gas, chemical), sports halls and large retail spaces.
- Technical depth: Product families include standard, cold-storage, high-output and certified hazardous-area variants with datasheets, IES files, and test reports to support accurate specification.
- Compliance & safety: Products carry relevant regional and international approvals (CE, CB, RoHS, UL/CSA where applicable) and hazardous-area certifications (ATEX/IECEx/UL,ECAS) when required.
- After-sales support: Field trials, sample testing, local commissioning assistance, spares availability and standardized warranty terms to reduce risk and simplify maintenance.
- Tailored commercial terms: Flexible MOQ, competitive tiered pricing, and clear lead-time commitments aligned to project schedules.
- Supply & support: Production coordination, packaging and labelling to your standards, on-time delivery, commissioning support and spare-parts planning.
- Compliance & documentation: Test reports, certificates, installation manuals and maintenance guides supplied per SKU.

Commitment to quality and safety We prioritize certified third-party testing, accurate documentation and traceable supply chains. Our selection and supply process emphasizes safety standards, risk assessment where applicable, and the right product for the right application to protect assets and people.

Industrial / Hazardous area applications

Power Electrical are engaged throughout multiple industrial sectors. Our products deliver reliable electrical/ lighting connections and protection in challenging operational environments.

Expert Knowledge

Over years of specializing in industrial / hazardous area products with deep understanding of ATEX/ IECEx regulations and zone requirements.

Manufacturing Origin

All products are manufactured in various Countries and available as per the requirement with full quality control and traceability.

Rapid Delivery

Fast turnaround times without compromising on quality standards or certification requirements. Air and Sea shipment on every month.

Custom Solutions

Bespoke designs manufactured to your exact specifications with full certification support on Electrical and Lighting.

Personal Service

Direct access to our technical manufacturer team for your application support and project consultation.

Wide Rage of products

Partnering with multiple manufacturers gives us the advantage of offering a wide certified product range.

Power Electrical Trading LLC — Practical, compliant, and performance-focused solutions for industrial and Oil and Gas electrical and lighting needs.

TRUSTED ACROSS CRITICAL SECTORS

Our products are engineered to thrive in real-world conditions where failure is not acceptable. In industries that demand total reliability and protection, these enclosures safeguard mission-critical systems with steadfast confidence.

Oil & Gas

Refineries, offshore rigs, and gas processing plants where explosive gases or vapors are present.

Petrochemicals & Chemical Processing

Environments with flammable chemicals, solvents, and volatile compounds.

Mining & Mineral Processing

Underground mines, surface operations, and processing units where combustible dust and gases exist.

Paint, Coating & Powder Industries

Areas where flammable vapors or fine powder can create hazardous atmospheres.

Wastewater Treatment & Pump Stations

UZones with methane or biogas emissions requiring explosion-proof equipment.

Infrastructure & Transport Hubs

Fuel storage depots, metro systems, and railway facilities with hazardous zones.

TRUSTED ACROSS CRITICAL SECTORS

Our products are engineered to thrive in real-world conditions where failure is not acceptable. In industries that demand total reliability and protection, these enclosures safeguard mission-critical systems with steadfast confidence.

Hospital and Food Processing

Clean room Lights for cleanrooms and other controlled environments in Labs, pharmaceutical production, Hospitals and Food processing Units.

High Temperature Environment

Ex LED Lighting for high temperature +120℃ & low temperature -65℃ environments.

Crops & Animal Husbandry

Biologically efficient Lights for plant growth, cattle farm, and poultry farm productivity.

Marine and Port Handlings

FloodLights, Container Sockets, Crane lights Lifting equipment.

Military Facilities and Infrastructure

Ex products for Bunkers, Explosive Storage units, Battery Room, Vendal proof lights for Holding Area.

Distribution Centers / Warehouses

Supply and installation services energy-efficient, LED for Highbay, FloodLights, Linear lights

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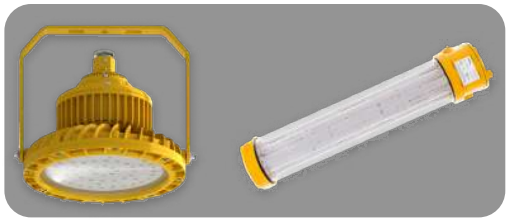

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Industrial LED Lighting Fixtures

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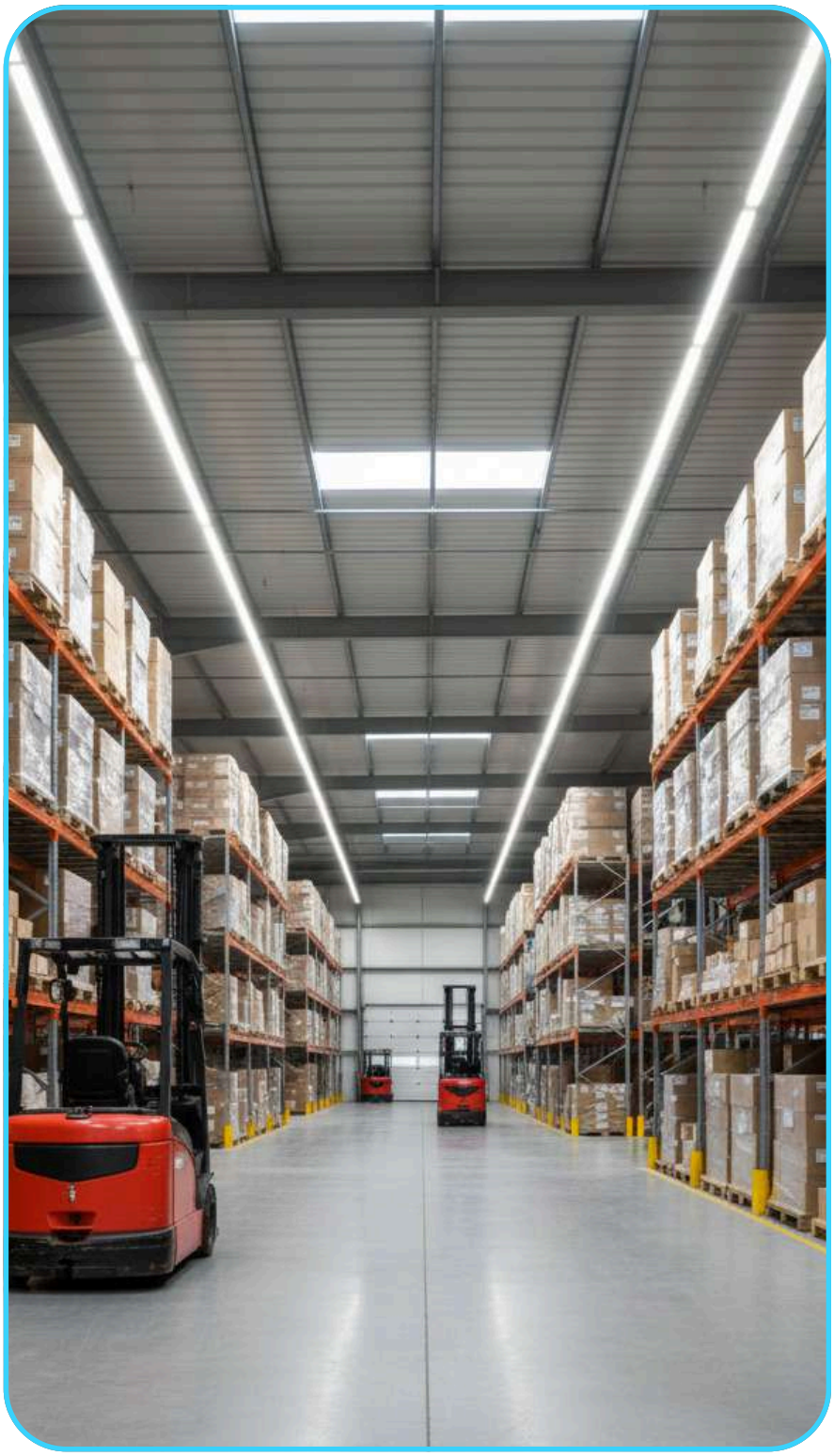


Lighting Design Service

Ensuring optimal lighting is a crucial step in any on-site project. With ever-evolving technology and changing demands, it's essential for clients to trust that their lighting designs are managed by seasoned professionals.

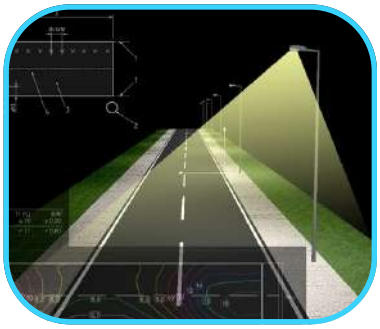
We provide a complete, custom digital lighting design service, powered by the latest technology and software. Our approach includes a clear, step-by-step consultation process to ensure you are informed and involved throughout.

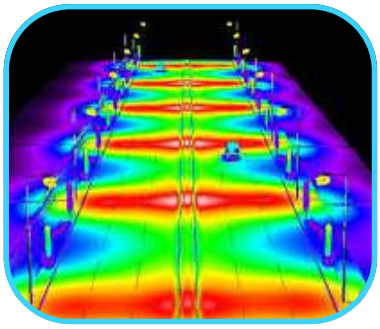
Our Five-Stage Lighting Design Process

1. **Project Scoping:** Our design team initiates contact with you or your installing contractor to understand the project's scope and objectives.

2. **Information Collation:** We gather all necessary project details, which may include site visits, obtaining detailed layout plans, and defining specific light level requirements.

3. **In-House Design & Visualization:** Our experienced specialists, skilled in designing for challenging industrial and hazardous environments, craft your lighting scheme. Using advanced software, we create accurate 3D renderings that optimize light output and cost-effectiveness for both installation and ongoing maintenance. We accommodate various drawing formats (DWG, DXF, PDF).





4. **Design Presentation:** We present the completed design in a full 3D rendering, offering a clear visualization of the final installation's light output and lux levels for your approval.

5. **Installation Support & Documentation:** Our engineers remain available to provide guidance on fitting placement and assist with any design adjustments during installation. We manage timely product delivery and ensure a seamless project flow, providing you with all necessary documentation for your operation and maintenance manuals.

We continuously innovate our customer service. That's why we're proud to provide our design service free of charge for all customers who select Our products for their installation.

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Industrial LED Lighting Fixtures

Flood Lights

CCT:- 4000K – 6500K

IP65 / 66

Flood lights are powerful lighting fixtures designed to illuminate Large industrial areas, Car Park Areas, Airport Apron, Port & Container Yard and Recreational Sports Stadium. Our lights are key for significant light coverage, perfect for outdoor areas and architectural highlights

High Bay LED Light IP65 / 66

CCT:- 3000K – 6000K

Our High Bay lights are to illuminate large, open areas with high ceilings, such as warehouses, factories, and large retail spaces. They are designed to provide sufficient and uniform light output from a significant height. LED High bays replace 250W-1500W+ HID and multi-lamp fluorescent fixtures. Easily can upgrade from HID and fluorescent high bays to our LED fixtures.

LED Chip :- Lumiled|Osram|Epistar

LED Driver :- Philips|Meanwell|Osram

Street/Roadway Light IP66

CCT:- 4000K – 6500K

Our Street light fixtures are the specialized lighting units mounted on poles along roads, pathways, and public areas. Their primary goal is to provide safe and effective illumination for Motorways, inter-urban main roads, roundabouts, pedestrian crossings, cycle and pedestrian paths, Parking areas, and airports.

Equipment included: Pole and Wall mounting accessories available.

Linear Industrial light IP65

CCT:- 4000K – 6500K

General-purpose weatherproof LED industrial luminaire is built for tough environments and simple setup. The included fast-fit clips mean you can mount it quickly and easily, no drilling required.

Operating ambient: -20°C to +50°C

Housing Body: FRP, Alloy Aluminum

Available in Emergency backup.

Vandal-Proof Light Fittings

Ensure safety and security in demanding environments. Our vandal-proof light fittings feature superior impact resistance (IK11+) and tamper-proof construction, perfect for open public spaces and correctional institutions where durability is paramount.

High impact resistance:- IK10+

Housing made of stainless steel. Diffuser: - Thick polycarbonate

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Industrial LED Lighting Fixtures

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Solar Lighting Fixtures

Our lights harness the power of the sun to deliver bright, reliable, and eco-friendly illumination for streets, pathways, parks, and more. Designed for independence from the grid, they offer a sustainable and cost-effective lighting solution. CCT:- 4000K – 6500K IP65. Power Rating: - 10W to 120W

Mounting Options: - Pole Mount Diameter, Wall Mount Bracket

Features: - Motion Sensor, Remote Control, Smart Control, Self Clean

Clean Room Led Lights

Our Cleanroom lighting fixtures are specialized lighting solutions designed to meet the stringent requirements of controlled environments like laboratories, pharmaceutical manufacturing, semiconductor fabrication, and sterile production areas.

- Flush-mount into ceiling (often 600×600 mm / 2×2 ft or 2×4 ft formats)
- Fully gasketed lens + frame to prevent dust/particle traps

High Temperature Lighting fixtures

LED Lighting — engineered for hazardous and extreme hot environments, these certified IECEx, ATEX and UL fixtures deliver reliable, The product offers high protection grade IP68, and applicable to high temperature 120°C & low temperature -65°C environment (may vary based on the product line and brand), the range includes linear/tube lights, high bays, floodlights, UVC sterilization units and emergency/exit luminaires. Suitable for the industrial environments like steel production, glass manufacturing and other manufacturing industries temperatures can reach +120ºC.

Retrofit LED Lights/Lamps

Retrofit LED lamps are designed to directly replace traditional light bulbs (like incandescent, halogen, or fluorescent tubes) in existing light fixtures. They use LED technology for a more energy-efficient, longer-lasting, and often better-quality light output. The key is that they fit into your current sockets and fixtures.

Emergency Exit Luminance

The emergency luminaire is designed to light escape routes, emergency exits, stairways, and other critical areas in industrial halls, production and assembly facilities, warehouses, logistics centers, and similar locations where emergency lighting is required. Its housing is made from robust, UV-stable polycarbonate for long-lasting durability. A dimming option is available on request. The luminaire is suitable for surface-mounted or suspended installation.

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Customazable HighBay & Floodlight Solutions.

POWER ELECTRICAL

Every site has different lighting needs—mounting height, area size, operating hours, heat, dust, voltage conditions, and required lux levels. Here we offer custom-built High Bay and Floodlight configurations to get the right performance, efficiency, and lifespan for your project.

What You Can Customize,

- Chose your LED driver brands: Mean Well, OSRAM, Philips.
- Chose your LED chip brands: CREE, Lumileds, Samsung.
- Housing materials: 316L stainless steel, mild steel.
- Accessories like sealing rings, Emergency backup.
- Various mounting options like Mounting bracket, Hook.
- Multiple product sizes from small to large Wattage.
- Required lux level / brightness expectation.
- Preferred CCT/CRI with Narrow / Medium / Wide beam angles

Emergency Back Up battery for High bay lights

Emergency Backup Battery can be suspended from the mounting surface with appropriate chain or cables (not supplied) or can be attached to the mounting surface with ½" conduit (not supplied).

All in One **LED Fixtures**

Emergency LED Kit

Sensor

Remote Control

Upgrade to Retrofit LED Lighting

Energy Efficiency: Reduce energy consumption by by up 70%.

Easy Installation: Designed to fit existing fithout modlfication

Long Lifesan: Lasts over 50,000 hours.

Customiation to fit existing fixtures without modification

High Lifesan: Superior color rendring for natural hues

Customizaible Features: Options for dimning and color temperature

High Quality Light: Superior color rendring for natural hues

Environmental Impact Eco-friendly: mercury-free and lower carbon footpriant

Traditional Lighting

Retrofit LED

POWER ELECTRICAL

Electrical Products

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Electrical Products

Industrial Socket & Plugs

Industrial sockets and plugs are heavy-duty connectors for safe power distribution in harsh environments in PVC, GRP, Marine Aluminum. They come in various standards (IEC 60309, NEMA) current ratings (≈16 A to several hundred Amp), and pole configurations for single- and three-phase systems. Choose by current/voltage, number of poles/earth, IP rating (up to IP67), contact material, cable size and certifications.

Interlocked Socket in Plastic/ GRP/Metal

Interlocked sockets (available in plastic, GRP or metal) are safety sockets that prevent live power being supplied unless a matching plug is fully inserted and the associated enclosure/door or isolator is correctly closed. They combine a mechanical/electrical interlock with the socket so power is only enabled when safe with circuit protection (MCB/RCD/fuse), reducing risk during maintenance or when accessing enclosures.

High Current Metal Socket & Plug

High-current metal sockets and plugs (250–800 A) are aluminum-alloy, corrosion-proof, tempered connectors with IP66/67 sealing, built for heavy industrial and marine use. We offer high current capacity, robust mechanical coupling, screw/bolted terminations for large conductors, integrated earthing and lockout options, and are chosen based on conductor size, voltage and certifications.

High AMP Interlocked Socket & Plug

High-current interlocked sockets and plugs (250–800 A) are aluminum-alloy, corrosion-proof, tempered connectors with IP67 sealing that prevent power unless a matching plug and enclosure. They deliver high current capacity and durable mechanical coupling, use screw/bolted terminations for large conductors, include integrated earthing and lockout/interlock features for safe maintenance, and are suited to heavy industrial, marine and power-distribution applications—select by conductor size, voltage, interlock compatibility and certifications.

Single Pole Cam Connectors

They are a type of electrical connector primarily used in high-current applications, often seen in welding, temporary power distribution, and entertainment lighting setups with a "cam" mechanism to create a secure, high-conductivity connection between two conductors. Designed to handle high amperage loads, often ranging from 100 amps to well over 1500 amps. Often color-coded to prevent misconnections.

Electrical Products

Enclosures and Junction Boxes

Enclosures and junction boxes are available in PVC, GRP, marine aluminum and stainless steel, with IP ratings such as IP44, IP56 and IP67 for varying dust/water protection. Fire-resistant options (E30, E60, E90) provide timed integrity for emergency systems, and units come in multiple sizes and shapes to suit surface, flush or bespoke installations. Choose material and IP/fire rating based on environment (corrosive, marine, indoor/outdoor) and required cable entry/termination arrangements.

Cable Glands and Lugs

Cable glands and lugs are key termination accessories: glands (PG/metric, NPT, compression, EMC, armored, ex-proof, waterproof to IP68) come in nylon, brass (nickel-plated), stainless steel (316), aluminum and silicone-sealed variants; lugs (crimp, solder, mechanical, tubular, pin/flag, battery) are usually copper (tinned), aluminum or nickel-plated copper with stainless-steel hardware. Select size and material by conductor type, current rating and environment.

Pre assembled Plug & Socket Box

Pre-assembled plug & socket boxes are ready-to-install units combining enclosure, inlet/outlet sockets, circuit protection (MCB/RCD/fuse), isolator, wiring and cable entries. They come in various formats (single/double/multi-socket, industrial IEC/BS/CEE, weatherproof/IP65–IP67, or Ex-rated), and materials (PVC, GRP, marine-grade aluminum, stainless steel).

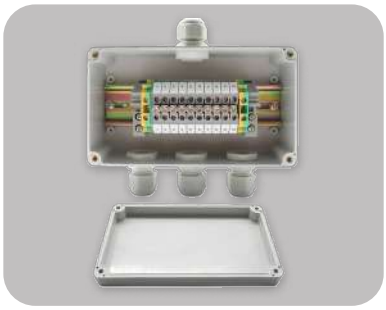
Isolators & Disconnection Switch

Isolators and disconnection switches safely interrupt supply for maintenance or emergencies. They come fused or non-fused, in single-, double-, 3- or 4-pole, and as load-break or no-load types (rotary, knife, cam, DIN-rail). Housings range from thermoplastic, aluminum to steel with IP ratings to IP66/67; ratings go from a few amps to thousands. Select by voltage/current, fault capacity, visible isolation needs and applicable standards.

Portable Safety Transformers

Portable safety transformers step voltages up or down to safe levels for temporary power and Isolation transformers transfer electrical energy between circuits while electrically isolating them to enhance safety and performance. They're compact, mobile, include multiple outlets and protective devices (fuses/MCB/RCD), and reduce electrical hazards. Choose by kVA rating, single- or three-phase, socket types, and IP/environment rating.

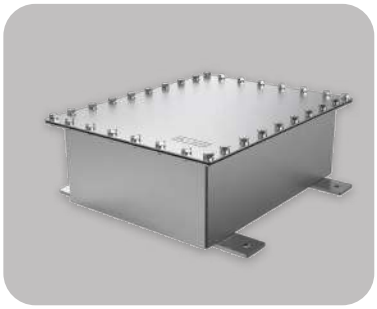
Electrical Products



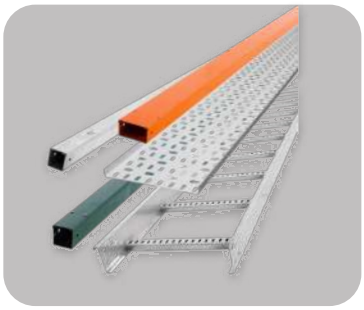
Custom Build Lighting Junction box

Custom-built lighting junction boxes are compact, durable enclosures that protect and organize lighting connections. Made from UV-stable thermoplastic, GRP, or steel, they include gland entries, numbered terminal blocks, earth/neutral bars, and space for DIN-rail components. With IP54–IP66 ratings, gasketed lids, clear labeling, and optional pre-wiring, they suit street, architectural, car park, event, and industrial lighting; choose by circuit count, conductor size, IP/IK rating, and standards compliance.

Custom Junction Box with IP68/69



Custom IP68 enclosures offer full protection against water ingress and are typically used in applications like offshore oil and gas platforms, the Thames Flood Barrier, river and reservoir monitoring systems, camera housings, underwater lighting fixtures, and lighting junction boxes. They are manufactured in a range of materials including 316L stainless steel, aluminium, GRP, and rigid polyurethane.



Cable Tray And Accessories

A versatile range of cable management products designed for industrial, commercial, and residential installations, including perforated & ladder cable trays (light, medium, and heavy duty), solid bottom trays, wire mesh trays, trunking, and a complete set of accessories such as bends, tees, reducers, couplers, splice plates, covers, support brackets, expansion joints, and cable dropouts. Available in **Hot dip galvanized** and other protective finishes such as **Power Coating for offshore Installation**, these products offer high tensile strength, excellent corrosion resistance, load capacities, and options for custom lengths and configurations. Cable trays are commonly made from Steel: Often galvanized for corrosion resistance, Stainless Steel (SS316L), Aluminum: Lightweight and corrosion-resistant, Glass/Fiber-Reinforced Plastic (GRP/FRP)

Custom Metal Power Distribution Box

A safe-area metal power distribution box is a robust, to distribute electrical power safely through a combination of an incoming isolator, MCB/MCCB protection, optional RCD/RCBO earth-leakage protection, and organized DIN-rail terminal blocks for phase, neutral, and earth. With a custom design, it can be built with the exact plug and socket types you need. The enclosure is typically Plastic, powder-coated steel or stainless steel, can be wall-mounted or floor-mounted, and is specified with the right IP rating and documentation and electrical code requirements.

Outdoor Weatherproof Custom Enclosures

We Can do the fabrication and customization in stainless steel and metal, ready to bring your exact specifications to life. Customer satisfaction is our top priority, and we're dedicated to meeting your most demanding design needs.

Waterproof Junction Boxes

A junction box is a protective enclosure for electrical connections, keeping them safe from environmental hazards and accidental touch. It's where wires are joined securely within a wiring system.

Ensure reliable outdoor electrical connections with these straightforward and robust boxes. They excel at keeping water out while offering easy access to terminals when needed. Perfect for outdoor lighting, security, and remote monitoring applications that require dependable protection without complexity.

Terminal Box Outdoor Applications

Heavy-duty terminal enclosures built for harsh outdoor conditions, designed to resist the environmental exposure that typically degrades standard electrical boxes over time. Ideal for marine settings and industrial sites where lower-cost options often fail due to corrosion or weather-related damage.

- Corrosion-resistant stainless steel construction
- Reliable gasket sealing
- Proven outdoor durability
- Internal mounting hardware included
- Marine-environment compatible

Industrial Panel and Control Enclosures

Control stations engineered for washdown zones and reliable operator access in harsh conditions. Built for demanding industrial environments where equipment takes heavy use and still needs to perform without interruption.

Designed to support process control and machinery operation in outdoor manufacturing areas where dependable performance matters most.

- IP66-rated for washdown protection
- Easy, operator-friendly access
- Strong protection for internal components
- Heavy-duty, rugged construction
- Custom control integration options

Enclosure Assembly:-

Our complete assembly service allows for rapid delivery in 2-4 weeks. We can also:-

- Any Custom any enclosure size.
- MOC are from Plastics, GRP, Aluminum and Stainless Steel.
- Provide a range of thicknesses, stainless and mild steels.
- Provide enclosures which can be deeper, longer or wider.
- Provide any size up to 2000mmx2000mmx800mm.
- Provide Standard terminals.
- Provide Trunking.
- Provide cable glands.
- Provide earth studs to your requirement.
- Provide gland plates any side.
- Provide base entries.
- Provide breather drains.
- Provide stopping plugs.
- Provide basic earth wiring.
- Provide numerous label options.
- Provide range of mounting plate options.
- Provide mounting feet / welded strap solutions.
- Provide unique hinge design allows for IP66 as standard.
- Provide terminal rail & earth bar solutions.
- Provide alternative finishes and painting on demand.

POWER ELECTRICAL

Explosion Proof Products (EX)

Certified By

POWER ELECTRICAL

What does our company actually provide to Hazardous areas ?

In hazardous areas, every detail matters when it comes to safety and reliability. This is exactly where our Engineering department comes in: We develop, configure, and supply explosion-protected components and assemblies for Terminal Boxes, control, distribution, isolation switches, monitoring, and signalling – ready for global use, fully compliant with international standards, and tailored to individual customer requirements.

Our portfolio includes:

✓ Ex Junction Boxes & UPS/NONUPS Power Distribution Board (Glass reinforced Polyester (GRP), Alloy Aluminium & Stainless Steel SS304, SS316L)
✓ Standard enclosures as well as fully customized solutions
✓ ATEX / IECEx / ECAS certified for Gas Zones 0, 1 & 2 and Dust Zones 21 & 22
✓ IP66 protection, up to 2200 V AC/DC, up to 500 A AC/DC
✓ Custom terminal configurations and cable entries

Local Control Stations & **Signaling Devices**
✓ Push buttons, emergency stop switches, isolation switches, selector switches, indicator lights, measuring instruments and more
✓ Compact design, reliable contact technology, wide range of variants

Signaling & **Safety Lighting**
✓ Ex d signal towers – modular designs
✓ LED lighting fixtures suitable for Skids, Analyzer shelter, Operator panels and instrumentation Rack.
✓The LED marine-grade metal "Ex d" luminaire for marine and hazardous environments requiring a linear fixture.
✓ Emergency exit and escape route lighting with modern LED technology and optional battery backup

What sets us apart:
⭐ Flexible, customer-specific solutions.
⭐ Fast and reliable delivery on Time.
⭐ High level of in-house support and multiple manufacturing support.
⭐ International certifications like ATEX, IECEx, Ecas.
⭐ Strong focus on quality, safety, and practical usability.

Zone Classifications for Gas Atmospheres and Combustible Dust

Gas Atmospheres

Description:- Explosive atmosphere present continuously or for long periods (>1000 hours/year). **Examples**: Inside storage tanks, process vessels.

Description:- Likely to occur during normal operation (10-1000 hours/year). **Examples**: Near pump seals, valve areas, filling points.

Description:- Not likely to occur, or only briefly (<10 hours/year). **Examples**: General process areas, control rooms.

Dust explosion

Description:- Dust cloud present continuously or frequently. **Examples**: Inside silos, powder handling equipment.

Description:- Dust cloud likely during normal operation. **Examples**: Powder filling stations, conveyor transfer points.

Description:- Dust cloud unlikely or only briefly present. **Examples**: Areas adjacent to dust handling equipment.

Type of explosion protection used in hazardous environments,

Ex d"Flameproof Enclosure"

Parts which can ignite an explosive atmosphere are contained within an enclosure into which the explosive atmosphere can enter but which will contain any resultant explosion and prevent its transmission outside of the enclosure.

Ex e"Increased Safety"

This protection method refers to equipment that does not ordinarily produce sparks and for which special precautions must be taken during Construction. Unacceptably high temperatures must also be avoided, during both regular operation and certain irregular situations.

Ex op "Optical radiation"

This is primarily concerned with the control of pulsed and continuous wave optical radiation through fiber optic cable with restrictions on the ratio of emitted optical power to the irradiated area. The protection concepts include Inherently Safe which is analogous to Ex i and provides over-power/energy fault protection. Other methods include mechanical protection of the fiber and optical interlocks.

Ex m "Encapsulation"

With this protection method all parts that may ignite an explosive atmosphere,are encapsulated in a resin that is sufficiently resistant to ambient influences.The atmosphere must neither be ignited by sparks, nor by heating inside the encapsulation.

Ex q "Powder Filling"

All equipment that has the potential to arc or to spark is contained within an enclosure filled with quartz or glass powder particles.The powder filling prevents the possibility of an ignition.

Ex o "Oil immersion"

Electrical equipment or parts of it are immersed in oil, thus avoiding ignition of the explosive atmosphere above the oil surface or outside the housing. This protection method is rarely applied now.

Ex t"Dust Protection, Enclosure

This method is applicable to electrical equipment protected by enclosure and surface temperature limitation for use in explosive and dust atmospheres.

Ex p "Pressurized Equipment"

The ingress of an explosive atmosphere in a housing containing electrical equipment, is avoided by maintaining a protective gas
(air or an inert gas) at a slight overpressure to the surrounding atmosphere. The overpressure may or may not be maintained by continuous floe.

Ex n "Non Sparking"

A type of protection where precautions are taken so that electrical equipment that has the potential to arc is not capable of igniting a surrounding explosive atmosphere. This can be further categorized as follows:
All electrical equipment for Zone 2
nC = sealing device
nC = gas check; obturaton
nC = non-igniting elements and
nR = restricted breathing enclosures

Ex i "Intrinsic Safety"

Intrinsic safety limits electrical energy in a product to a level that won't ignite a surrounding explosive atmosphere, even if faults occur. This requires careful design of both the exposed equipment and any connected apparatus.

In short: We make explosion-protected solutions ready for operation – from the initial concept to the finished product.

Explosion Proof Products (EX)

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Explosion proof Socket and Plugs

Explosion-proof electrical connectors and receptacles with optional integrated switching mechanisms are designed for hazardous environments. These devices meet both ATEX and IECEx Certifications. They are suitable for use in hazardous location Zones 1 & 2 (flammable gases) and Zones 21 & 22 (combustible dust). This product line is available with as female receptacles, male connector inlets, mounting boxes, and transition sleeves, enabling flexible installation configurations.

Ex Isolators, JB and Switches

Designed for hazardous sites like chemical plants, refineries, offshore platforms, tankers, and military installations, these enclosures support cable distribution, lighting, heat-trace systems, lighting JB and high-power heaters. Constructed from GRP, aluminium alloy and stainless steel, they offer pendant or floor mounting and cable entries compatible with rubber or armoured cables.

Ex Motor Start-Stop Control Station

Widely used on worksites for motor start/stop control, conversion, and real-time display of electrical parameters, plus speed regulation, signal switching, and instrumentation readouts. They support hanging or floor-standing mounting and offer multiple cable-entry options to fit rubber or armored cables. Typical features include rugged enclosures for industrial environments, customizable layouts for switches and instruments, and easy access for maintenance and wiring.

Ex Cable Glands and Adaptors

Designed for hazardous sites like chemical plants, refineries, offshore platforms, tankers, and military installations, these enclosures support cable distribution, lighting, heat-trace systems, lighting JB and high-power heaters. Constructed from GRP, aluminium alloy and stainless steel, they offer pendant or floor mounting and cable entries compatible with rubber or armoured cables.

Ex Temperature Control Switch

An Ex Temperature Control Switch is an explosion-protected device used to monitor and control temperature in hazardous (classified) areas. Suitable for the heat tracing system for the anti-consolidate in hazardous area, capable for responding to changes in the ambient temperature, with the adjustable set points. Control a single heat tracing circuit or control the multi heat tracing circuits as a contactor.

Explosion Proof Products (EX)

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Ex Signaling Devices

Ex Signaling Devices are certified electrical warning and notification solutions engineered for safe operation in hazardous areas containing explosive gases, vapors, or dust. Designed to comply with international safety standards, these devices deliver reliable visual and audible alerts without risk of igniting the surrounding explosive atmosphere.

Ex Axial/Exhaust Fan

Ex Axial and Exhaust Fans are critical ventilation solutions designed specifically for hazardous environments where the presence of flammable gases, vapors, or mists creates a risk of explosion. These fans safely extract dangerous fumes or supply fresh air without becoming an ignition source, ensuring both personnel safety and process integrity. Different Voltages vary from 110V, 230V (1-phase) / 400V, 690V (3-phase).

Ex Terminal Box (Ex d, e)

These terminal boxes feature housings constructed from high-impact fiberglass-reinforced polyester, Alloy Aluminum and SS316L material, with all metallic components treated for corrosion resistance with special colour coating. Multiple configurations are available to meet diverse applications with different Ex d, e classification standards. Cable entries use various plastic or metal glands; unused holes are sealed with plugs for future expansion.

Ex Safety/Power Isolator Switches

Ex Safety/Power Isolator Switches are specially designed, explosion-proof electrical devices used for safe and isolation of circuits for hazardous environments where flammable gases, vapors, or may exist. Current Rating available from 16A to 180A, with 3-pole and 4-pole versions. These switches comply with international certifications such as ATEX and IECEx, ensuring safe operation primarily in Zones 1, 2 (gas) and Zones 21, 22 (dust) hazardous locations. Made from materials like GRP, die-cast aluminum, or SS316L.

Sample Cooler

Sample coolers are essential for conditioning steam, water, and process fluids at high pressures and temperatures to enable safe grab sampling or online analysis. They use a double helical coil with a full counter-flow five-pass design to handle steam, hydrocarbons, oils, brines, and gases, achieving compact size and excellent heat transfer through a 3Ts approach. Typical outlet approach temperatures are 1°C–5°C, making them suitable for centralized sampling systems, SWAS, field sampling panels, water treatment and desalination plants, and manual sampling.

Explosion Proof Products (EX)

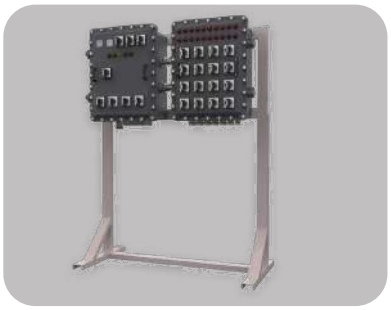
Certified By

Ex d Control Panels & PDB

We can provide custom built ATEX/IECEx certified panels depending upon engineering specification and factory capacity on 4 week lead times. Ex d flameproof control panels can be customised for automation, production, process and hazardous area power distribution – we can arrange for control panel customisation with panels populated with terminals, drilled to accommodate cable glands according to zone location, gas group and international hazardous area certification requirements.

Ex Digital/Analog Signal JB

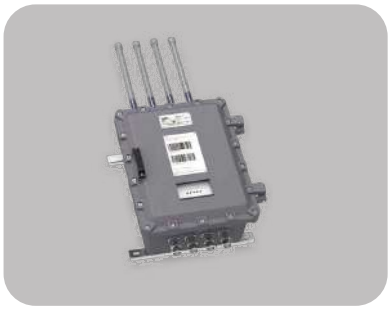
Our Ex Signal Junction Boxes are the critical interface nodes between field instrumentation and control systems (DCS/PLC) in hazardous areas. Designed to preserve signal integrity while ensuring explosion protection, these enclosures facilitate the connection, distribution, and marshalling of analog and digital signals. Designed to handle a wide array of instrumentation signals with minimal interference or insertion loss.



Ex Distribution Boards Assemblies

Overview Ex Distribution Boards and Switchgear Assemblies are engineered power distribution solutions for hazardous areas. These assemblies combine certified explosion protection, reliable switching and protection devices, and robust mechanical construction to enable safe power distribution, control and isolation for process plants, offshore platforms, and other classified environments. Modular designs for easy specification, installation and maintenance.

Ex Access Point



This product is for the application of wireless local area network technology in hazardous environment. It is especially suitable for monitoring of dangerous goods and management of personnel and Internet of things in chemical, pharmaceutical, petrochemical and energy industries and oil and gas extraction platforms. The different Brand gateway can be selected to meet the customer requirements. The various mounting types and cable entries are available, such as hanging mounting and stand floor mounting.

Ex Pushbutton box

Overview Our Ex Pushbutton Boxes are robust, explosion-protected enclosures designed to house and protect manual control devices like pushbuttons, selector switches, and indicator lamps for use in hazardous locations. They provide a safe and reliable means of initiating or controlling processes in areas where flammable gases, vapors, or combustible dusts may be present. Allow operators to start, stop, jog or reset equipment (pumps, motors, conveyors) safely within hazardous zones.

Custom Made Explosion-Proof Products

We have the flexibility to customize individual switched interlocked socket outlets and switch-disconnected devices using specialized accessories.

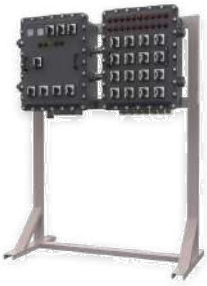
ACCESSORIES FOR SWITCHED INTERLOCKED SOCKET OUTLETS & SWITCH-DISCONNECTORS

- Auxiliary contacts
- Breather/drain valve (only for switch disconnectors)
- Earth stud (external)
- Earth continuity plate with internal earth stud
- With EMC metallic cable glands
- With metallic cable glands for armoured cable
- With metallic cable glands for unarmoured cable

Based on the product categories, Power Electrical provides custom-made solutions with a high level of customization, backed by a broad range of products and compatible accessories.

ACCESSORIES FOR JUNCTION BOXES

- Cable glands / caps
- Drain and Breather/drain valve
- Earth continuity plate (internal) in zync-plated steel
- Earth stud (pin, nuts and washer) in brass or stainless steel AISI 316L
- External fixing brackets
- External flanges (only for stainless steel enclosures)
- Internal mounting plate
- Blue Terminals
- Threaded earth-bar



ACCESSORIES FOR LOCAL CONTROL STATIONS AND POWER DISTRIBUTION ASSEMBLIES

Actuators and operation-heads

- Buzzer
- Double push button
- Emergency stop
- Mushroom
- Pilot light
- Potentiometer
- Push button
- Push-button with pilot light

Circuit breaker modules

- Circuit breaker module
- Ac contactor module
- Ac contatctor module + thermorelay
- Control transformer
- Creepage breaker module
- Thermorelay module

Electronic components

- Diode module
- IS Barriers
- Electronic relay module
- Fuses module
- Resistance module
- Voltage suppressor diode module
- Display Control Device

Instruments

- Ammeter
- Milliammeter
- Voltmeter
- Temperature-controlled Meter

TYPES OF Ex CUSTOM ELECTRICAL PRODUCTS

- Terminal Junction Box (GRP, Aluminum, SS316L).
- Hazardous area Lighting fixtures and junction Boxes.
- Signal/Analog/Digital/Power Junction Boxes.
- Ex Power Distribution Board.
- UPS/ Non-UPS PDB.
- Communication Junction Box with Patch Panel and Converters.
- Barrier Control Boxes.
- Intrinsically Safe "ia, ib" Terminal Boxes.
- Isolation switches (GRP, Aluminum, SS316L).

For more information about customization service or to submit your customization request please contact the Technical Information Center by sending an email to info@powerelectricaluae.com.

Our Hazardous Area Enclosures Range

We have the flexibility to customize individual Explosion proof Enclosures in GRP, Aluminum Alloy and SS316L. An extensive portfolio of enclosures available in a variety of sizes makes it possible to precisely tailor a solution to individual user needs. The offer includes both small junction boxes and larger boxes, ensuring versatility of applications.

Terminal and Junction boxes

Terminal Enclosures Built for Industrial /ATEX/IECEx Demands. Ex terminal boxes, made of glass fibre reinforced polyester (GRP), Aluminium alloy, Stainless steel SS316L, are designed for use in explosive atmospheres: Zones 1, 2 (gases) and 21, 22 (dusts). They feature high resistance to corrosion and UV radiation, ensuring long-term durability even in harsh industrial environments. The boxes are used in industries such as chemical, petrochemical, and power generation. Internal mounting screws, made of corrosion-resistant materials, significantly increase the durability and service life of the entire structure.

Types of protection
- Ex e, db eb, ia/ib mb design
- Design for intrinsically safe circuits Ex i
- Combined Ex e / Ex i design

Applications
- Control boxes
- Switches and selectors
- Battery enclosures
- Electrical equipment enclosures
- Instrument enclosures
- Terminal boxes
- Lighting control
- Isolation Switches

Accessories
- PE/PA rail with terminals.
- Glands made of polyamide or steel.
- Grounding plate for metal glands.
- Brass earth tags for metal cable glands.
- Mounting plate.
- External grounding.
- Hinged cover available for SS enclosures
- Intrinsically Safe Barriers

UPS/NON UPS PDB (Power Distribution Board)

A PDB is mainly built to distribute electrical power safely from an incoming supply to multiple outgoing circuits. In hazardous environments—such as oil and gas facilities, chemical plants, or any location with explosive atmospheres—power distribution must be designed with extreme safety in mind. Enclosure are available in GRP, Aluminium alloy, Stainless steel SS316L as per the project requirement and rating. The choice between a UPS (Uninterruptible Power Supply) PDB and a standard (non-UPS) PDB depends entirely on the criticality of the equipment being powered. Enclosures are available in two different executions: cover fixed to body by anti loosening screws and cover jointed to body by hinges.

Applications
- Control boxes
- Emergency Shutdown (ESD)systems
- Fire & Gas (F&G) detection panels
- Electrical equipment enclosures
- Instrument enclosures
- Alarm sounders/beacons
- Marshalling cabinets, network switches
- Control/PLC/RTU panels
- Isolation Switches with MCB
- Telecom/radios/CCTV in Zone areas

Accessories/Components
- Emergency Mushroom Head Push buttons
- Selector Switches
- Protective Window
- Signal Lamps with or without Button
- Potentiometers
- Voltmeters, Ammeters, Milliammeters
- Switch module 2 – Pole
- Circuit breakers
- Load Isolation Switches with Handle.
- Patch panel and FO converter.

Types of protection
- Ex d (flameproof) for arcing components
- Ex e (increased safety) for non-arcing terminals
- Ex p (purged/pressurized) for complex assemblies
- Ex-de (flameproof + increased safety) In GRP

All PDBs can be coated in custom colors based on your needs.

Isolation switches

Ex Isolation switches are advanced devices that can also act as a main and safety switch (they are disconnectors and switches in the AC-23 and AC-3 use category).

Ex isolation switches have been designed for the safe and permanent disconnection of electrical circuits in gas and dust hazardous areas. Thanks to the use of high-quality components, robust modular construction and compliance with the requirements of the ATEX and IECEx directives, these circuit breakers are the ideal solution for industrial plant designers, machine manufacturers and end users for whom safety and reliability are a priority.

Types of protection
- Ex d (flameproof) for arcing components
- Ex e (increased safety) for non-arcing terminals
- Housing material: GRP, Alloy Aluminium and Stainless steel.
- Padlockable handle.

Applications
- Disconnectors for motors, pumps, fans Etc
- Working in applications with high inertia.
- Service protection for maintenance work.
- Disconnection of motors, transformers, heaters and inductive equipment.
- In combination with automation systems it can act as a power status indicator.

Our Hazardous Area Product Range

Wall type socket

Plug

Plug with protective cover

Sockets and plugs for Ex zones

Explosion-proof plugs and sockets are specialized electrical connectors suitable for use in Zones 1, 2, 21 and 22. Their extremely robust housings tightly isolate any potential ignition sources. In the event of a fault, the spark is trapped inside the housing and does not enter the explosive atmosphere. This solution effectively protects people, equipment and the entire infrastructure from a potential ignition source entering the vicinity of the explosive atmosphere. Explosion-proof sockets can be designed for wall or flange mounting.

Use of IECEx, ATEX plugs and sockets.

- Aluminium Alloy : Lightweight, corrosion-resistant, and durable.
- Glass Reinforced Polyester (GRP): Non-corrosive, impact-resistant, suitable for harsh environments.

Protection of the electrical installation under conditions of high risk of ignition of gaseous or dust explosive atmospheres is necessary in many industries, for example:

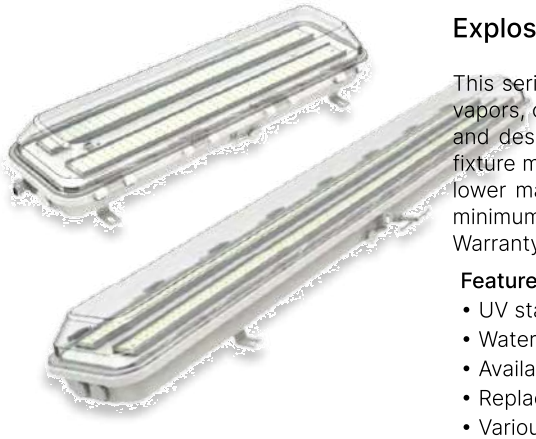
ATEX / IECEx Cable glands

ATEX & IECEx cable glands are engineered to securely terminate and fasten electrical cables to equipment, ensuring a safe and dependable connection for machinery and industrial installations. They are commonly used with power, control, instrumentation, data, and communication cables, wherever a robust cable entry system is required.

In addition to providing strain relief, these glands help seal enclosures and enhance protection against dust, moisture, and water, making them well-suited for demanding environments exposed to vibration, water contamination, and extreme temperatures. Available in metallic, non-metallic, or hybrid constructions, ATEX & IECEx cable glands are widely used across industries that rely on electrical, power control, instrumentation, automation, and related systems.

IECEx & ATEX certified cable glands features:

- Majority of metric and NPT threads are available.
- Nickel plated brass, stainless steel 316L and in Brass.
- Applicable for Zones 1/21 and 2/22
- Variety of sizes M20 to M90
- Sealing on outer and inner sheath.
- Accessories: PVC shroud, locknut, earth tag, washers, adaptor/reduce.



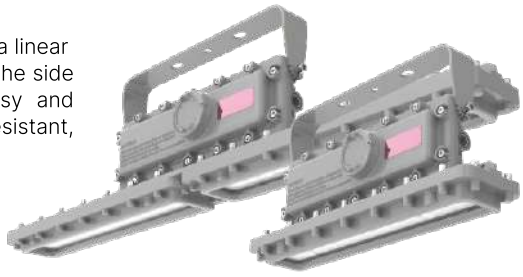
Explosion proof Linear LED Light for Shelters with Emergency Backup

This series linear vapor tight is designed for use in hazardous locations where flammable gases, vapors, or liquids might be present during normal facility operations. The combination of the style and design of new LED technology with the ruggedness and durability of a hazardous location fixture makes it ideal for retrofit of existing HPS/MH and offers higher efficacy for energy savings, lower maintenance costs and shorter payback. The optional battery backup system provides a minimum of 180 minutes operation after AC power is lost during an emergency. 5-Year Standard Warranty for Fixture.

Features

- UV stabilized, impact-resistant fiberglass reinforced polycarbonate lens.
- Water-proof, vapor-proof, dust-proof, and corrosion resistant, great reliability
- Available in two and four foot lengths.
- Replaceable LED light strip, replaceable driver
- Variouse Mounting Accessories available.
- Light distribution 120 degree, 0-10V dimming.
- Emergency 3H battery back-up optional
- Variouse Mounting Accessories available.

Offshore Ex db Metal LED Lighting Fixtures



This Series LED luminaire is the ideal choice for marine and hazardous applications where a linear design is required. Featuring the design of structure, the power box can be opened from the side by opening the M75 circular cover, without the need to loosen multiple screws, easy and convenient for installation and maintenance. Housing: Copper-free aluminum (corrosion resistant, good thermal performance). it comes in Lengths: 2 ft (I2) and 4 ft (I4).

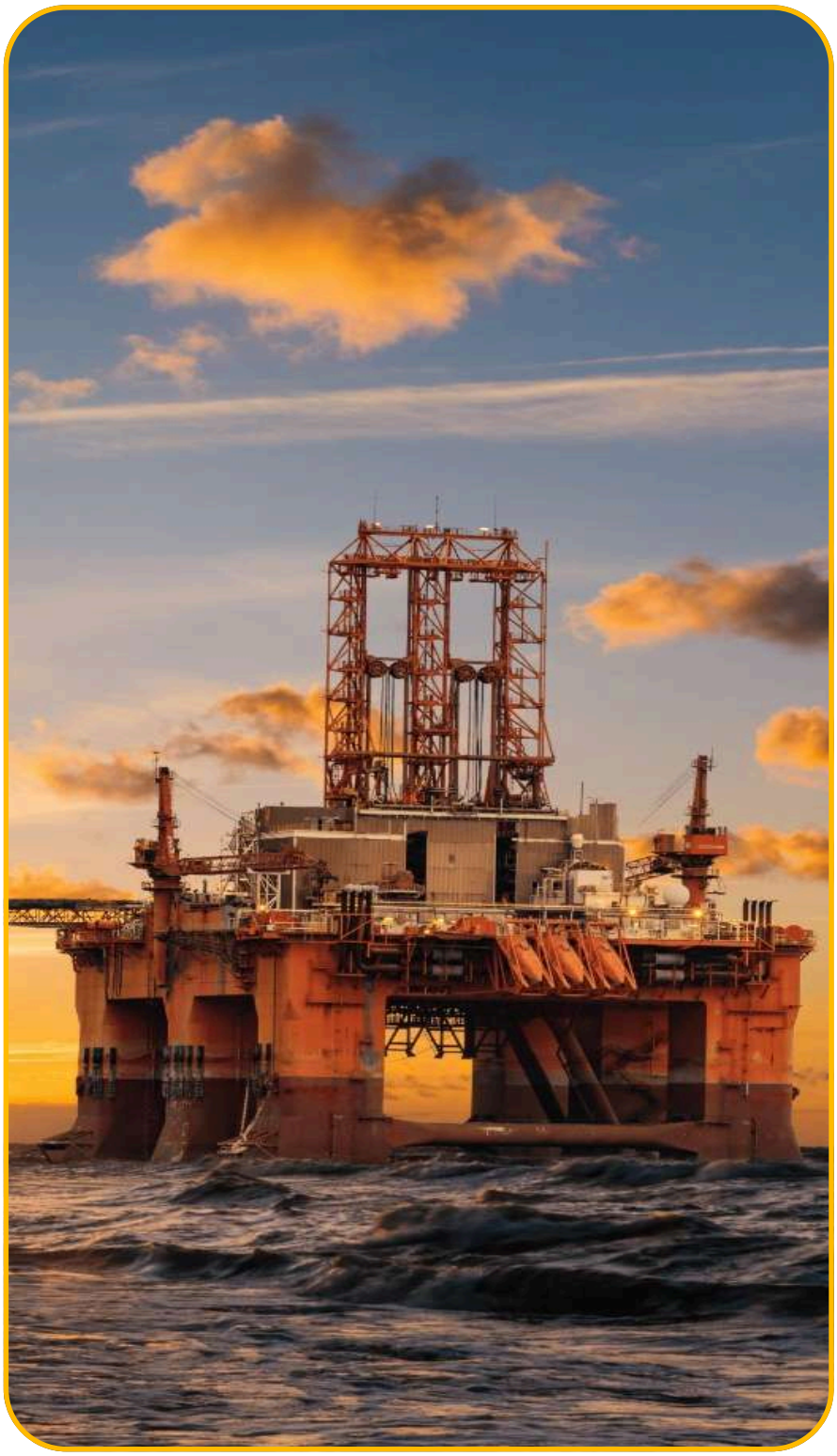
Features

- Copper-free aluminum housing (excellent corrosion resistance).
- Emergency Backup: 3-hour emergency operation available.
- Efficacy: Up to 140 lumen per watt.
- ATEX, IECEx & ECAS Certified for hazardous locations.

POWER ELECTRICAL

LED Fixtures for Marine and Hazardous applications

Certified By

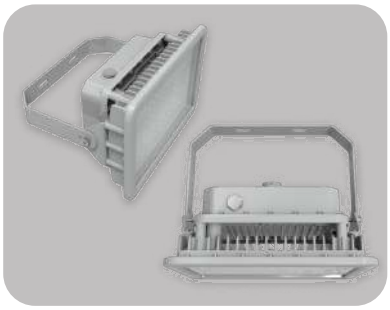


POWER ELECTRICAL

LED Fixtures for Marine and Hazardous applications

POWER ELECTRICAL

Ex Flood Light



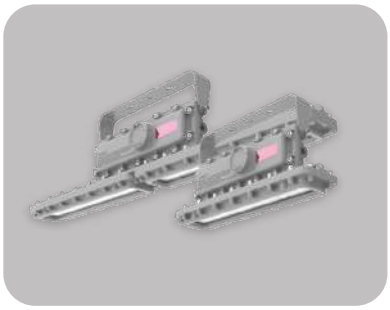
A compact, certified explosion-proof (Ex) flood light with high-output LED illumination for hazardous locations. Available with ATEX/IECEx and UL and rated for Zone 1/21, Zone 2/22 or Class I Div 1/2, it features corrosion -resistant marine-grade housing, high impact-rated lens, selectable lumen packages and color temperatures. Designed for safe, low-maintenance lighting to maximize operational safety, ideal for oil & gas refineries, tank farms, offshore rigs, LNG terminals, chemical plants & hazardous storage.

Ex High intensive High bay

A rugged, explosion-proof (Ex) high-intensity Highbay light delivering powerful LED illumination for classified indoor and semi-enclosed industrial areas. Designed to provide reliable, low-maintenance, high-lux lighting to enhance safety and productivity, it's ideal for petrochemical plants, refinery process halls, offshore platform interiors, tank farms, large warehouses and heavy-duty manufacturing facilities.

Ex LED Linear Lights

The linear vapor-tight fixture is for hazardous locations where flammable gases, vapors, or liquids may be present during normal operations. it is ideal for retrofitting existing HPS/MH installations, delivering higher efficacy, lower maintenance, and faster payback. Suited for skids, analysis shelters, operator panels and instrumentation racks, it also offers an optional battery backup with 3h. Available housing materials include FRP (Fiber-reinforced plastic), GRP, alloy aluminium, and stainless steel.



Ex Metal Marine Grade LED Fixtures

The LED marine-grade metal "Ex d" luminaire is an excellent option for marine and hazardous environments requiring a linear fixture. Built to withstand moisture, dirt, dust, corrosion and vibration—as well as exposure to wind, water, snow or high ambient temperatures—it features a copper-free aluminum housing with a protective powder coating for superior corrosion resistance and thermal performance, and is available with various mounting accessories.

Pole Mounting LED Ex Low Bay Light

The LED luminaire is an excellent solution for hazardous locations, particularly for pole-mounted lighting of oil storage tank platforms. Available in multiple housing shapes, to accommodate a variety of installation requirements and mounting configurations, certified performance in demanding environments. Optional emergency battery backup and ATEX/ IECEx certification are available to meet safety and continuity requirements.

Certified By

LED Fixtures for Marine and Hazardous applications

POWER ELECTRICAL

Ex Panel Mount Lights

Compact Ex Panel Mount Lights provide low-profile illumination specifically engineered for hazardous-area control panels and instrument enclosures. Certified to ATEX/IECEx and UL/CSA standards (Zone 1/21, Zone 2/22, Class I Div 1/2 options), they feature efficient low-heat LED modules, corrosion-resistant housings, vibration-proof mounting and optional dimming or integrated switch. Commonly installed onsite offices, Fuel station in petrochemical plants, refineries, offshore platforms and industrial processing facilities.

Ex Exit Light with Emergency

A certified explosion-proof Ex Exit Light with integrated emergency backup offers clear, reliable egress indication for hazardous environments. It combines high-visibility photo luminescent or LED exit signage, sealed corrosion-resistant enclosure (IP66/67), intrinsic safety circuitry, emergency battery providing 90 minutes runtime, self-test and remote- monitoring options. Its primary function is to ensure safe, code-compliant evacuation guidance during power failures or incidents, crew and personnel safety.

Ex Portable LED Lights

Durable Ex Portable LED Lights offer safe, handheld illumination for hazardous zones. Certified ATEX/IECEx (Zone 1/21, Zone 2/22, Class I Div 1/2 options), they feature high-output LEDs, rechargeable batterries with long runtime, impact- and corrosion-resistant IP66/67 housings, intrinsic-safety design and selectable beam modes. Purpose: provide reliable, spark-free portable lighting for inspections, maintenance and emergencies. Uses: offshore platforms, chemical and petrochemical plants, refineries, confined spaces and field service in classified areas.

Ex Bulk Head Lights

Strongly built Sturdy Ex Bulk Head Lights provide safe, diffuse area illumination for hazardous locations. Certified to ATEX/IECEx (Zone 1/21, Zone 2/22, Class I Div 1/2 options), they feature energy-efficient LED modules, IP66/67 corrosion-resistant housings, and optional emergency versions. Purpose: deliver reliable, low-maintenance lighting without ignition risk. Uses: walkways, stairwells, platforms, external facades & general area lighting in refineries, chemical plants, offshore and other classified areas.

Ex Warning Lights

Explosion-proof warning lights are special signal lights designed to operate safely in areas where flammable gases, vapors, or dust may be present. They are commonly used in oil & gas plants, refineries, chemical plants, fuel stations, and hazardous industrial zones. Key Features are

- Strong enclosure (usually aluminum or stainless steel) that prevents internal sparks from igniting surrounding gases.
- High-visibility signaling – Bright flashing or rotating lights (often LED) to warn workers of danger or system status.

Certified By

POWER ELECTRICAL

Explosion Proof Air Conditioner

Certified By

POWER ELECTRICAL

Explosion Proof Air Conditioner

Ex Window Type Air Conditioner

Explosion-proof Unitary air conditioner is explosion-proof electrical product certified by IECEx /ATEX and used for Zone 1, Zone 2, Zone21, Zone 22, IIA, IIB, IIC, IIIA, IIIB, IIIC class, T1 ~ T4 group. Applicable to petrochemical, marine engineering and other fields where there are flammable explosive gas driller room, electrical control room, warehouse, gas station, and etc. for temperature control purpose. Product is made of Stainless steel (SS304, SS316L) and Carbon Steel with Powder Coating Casing.

Ex Wall Mount/Split Air Conditioner

Explosion-proof split air conditioner is explosion-proof electrical product certified by IECEx / ATEX and used for Zone 1, Zone 2. Applicable to control room, driller room, workshop, hazardous goods warehouse in petroleum, chemical, military, power utility, marine engineering and other fields where they maintain safe ambient conditions for personnel and equipment without creating ignition sources. Primary Applications in Control rooms, local cabinets, Analysing shelters and oil & Gas Skids and battery rooms etc.

Explosion proof (EX) Cabinet Air Conditioner

Ex Signalling Devices are specialized alert systems engineered for safe operation in hazardous environments containing explosive gases and dust. These devices meet rigorous international safety standards including ATEX and IECEx certifications, ensuring compliance with global safety regulations. These devices are manufactured from robust materials such as stainless steel and fiberglass. They are widely deployed across critical sectors including petrochemical plants, oil & gas operations, and mining facilities where safety in explosive atmospheres is paramount.

Ex Heating & Ventilation Air Conditioning Unit

Explosion-proof heating and ventilation air conditioning unit is explosion-proof electrical product certified by ATEX / IECEx / EAC / CHINA Ex and used for Zone 1, Zone 2, IIA, IIB, IIC class, T1 ~ T4 group. Applicable to online analytical cabin, control room, operating room, electrical room in petrochemical, marine and other fields where there are requirements for positive pressure ventilation, indoor temperature and humidity regulation. Unit design concept is targeted clearly and specifically, unit is long-term continuous operational in harsh industrial environment; Unit frame is made of hot galvanized plate or stainless steel molding to achieve high strength and good stability.

Certified By

Explosion-Proof Internal Components

Explosion-protected Control panels, Selector switches, are usually built by combining certified Ex components suitable for the zone (0/1/2 or 20/21/22), gas/dust group, and temperature class. The most common components are:

Patch Panel

A patch panel in an Ex communication junction box is used to organize, connect, and manage communication cables such as Ethernet or fiber optic lines. It provides a structured point for terminating and distributing network connections, troubleshooting, and future expansions while keeping the wiring neat and secure.

Ethernet Media Converters

Ethernet media converters in an Ex communication junction box convert copper Ethernet signals to fiber optics, enabling safe, interference-free, and long-distance communication in hazardous areas. Typical Use in Ex Junction Boxes for IP cameras, Industrial switches, Control systems / PLC networks.

Push Buttons

Spring-return pushbutton units and spring-return double pushbuttons can be used with different contact modules to create a wide range of NO and NC contact configurations. They are available in various colours and can optionally be supplied with different marking labels.

Emergency Mushroom Head Pushbuttons

Spring-return mushroom-head pushbutton units,Push-pull emergency mushroom-head pushbutton units (with or without key extraction) and Turn-to-release emergency mushroom-head pushbutton units, supplied complete with one electrical contact module.

Circuit breakers

Circuit breakers are devices that interrupt the power supply in the event of a short circuit. They are designed to enhance safety in potentially explosive atmospheres and are available with current ratings of 6, 10, 16, 20, 25, 32, or 40 A, and residual current sensitivities of 10, 30, 100, and 300 mA.

Voltmeters, Ammeters, Miliammeters

The HVA (Harmonic Voltage Analysis) voltmeter, ammeter, and milliammeter units are available with a wide range of measuring options, with scales multiplied 2 or 5 times. The ammeter can measure current directly or operate together with current transformers, and secondary current transformers.

Is Barrier

An IS barrier (Intrinsic Safety barrier) is used to limit electrical energy entering a hazardous area, ensuring that voltage and current remain low enough to prevent sparks or heat that could ignite explosive gases or dust. It protects field instruments and allows safe communication between hazardous and safe areas.

Ex Fuse Module

An Ex fuse module is used in hazardous-area enclosures to protect electrical circuits from overcurrent or short circuits. It safely interrupts the circuit when excessive current occurs, helping protect connected equipment and maintain safe operation in explosive environments.

Miniature Relay Module

A explosion proof miniature relay module is a compact switching device used in control circuits to operate and isolate electrical signals. It allows low-power control signals to safely switch higher-power loads within control systems.

IS current/Control transformer Module

An IS current/control transformer module is used in intrinsically safe circuits to measure or control current while limiting energy levels entering hazardous areas. It provides signal isolation and ensures safe operation of connected instruments in explosive environments.

Signal Lamps with Button

Spring-return illuminated push button unit supplied with an LED module, available in different voltage ratings and equipped with one electrical contact. Offered with various combinations of NO and NC contacts and available in multiple colours.

Signal Lamps

Signal lamps certified for hazardous areas. They are supplied with an LED unit suitable for different voltage ratings according to the electrical circuit requirements. The lamps are available in various colors.

Explosion-Proof Internal Components

Potentiometers

Potentiometer unit available with a range of resistance values. The control knob is equipped with a large visual display for easy setting and monitoring.

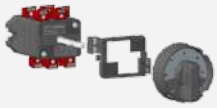
Switch module 2/4 – Pole

Two independent pressing rods control separate groups of contacts. One or Two groups or Four groups can be operated by different actuator heads to perform distinct functions.

Contactors Rated voltage 24 V / 240 V

Contactors are compact, durable components designed for Ex e enclosures in Zones 1 and 2. They are easy to install, corrosion-resistant, and suitable for various hazardous-area applications.

Load Isolation Switches with Handle for currents 180 A



The load isolation switch module is certified for installation in Ex e enclosures, features flame-retardant construction, fast connect/disconnect via spring action, and stainless steel terminal screws.

Protective Window

Pilot light window of thermoresistant glass sealed with auto-leveling silicone

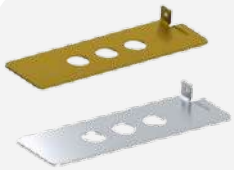
Selector Switches

Stay-put or spring-return key selector units supplied with one electrical contact module

PE/PA rail for grounding

A PE/PA rail for grounding is a metal mounting rail used to securely connect protective earth (PE) and equipotential bonding (PA) conductors, ensuring safe and organized grounding in electrical and hazardous-area installations.

Grounding plate made of brass/SS



A grounding plate made of brass or stainless steel is used to provide a reliable earthing point for electrical components, ensuring proper grounding and enhancing safety in hazardous-area installations.

Breathing /Drainage Valve

A breathing/drainage valve is used in enclosures to allow air exchange while preventing moisture or dust ingress. It helps balance internal and external pressure, reduces condensation, and protects sensitive equipment in industrial and hazardous environments.

Buzzer components

Buzzer components produce audible alarms in electrical systems, consisting of a buzzer unit, control circuit, power supply, and protective housing, often rugged or flame-retardant. They are used for warnings, status signals, and safety alerts.

PE Terminal & Terminal Block

PE terminals and terminal blocks provide secure connections for grounding and wiring, keeping electrical circuits organized and safe.

Mounting plate

Buzzer components produce audible alarms in electrical systems, consisting of a buzzer unit, control circuit, power supply, and protective housing, often rugged or flame-retardant. They are used for warnings, status signals, and safety alerts.

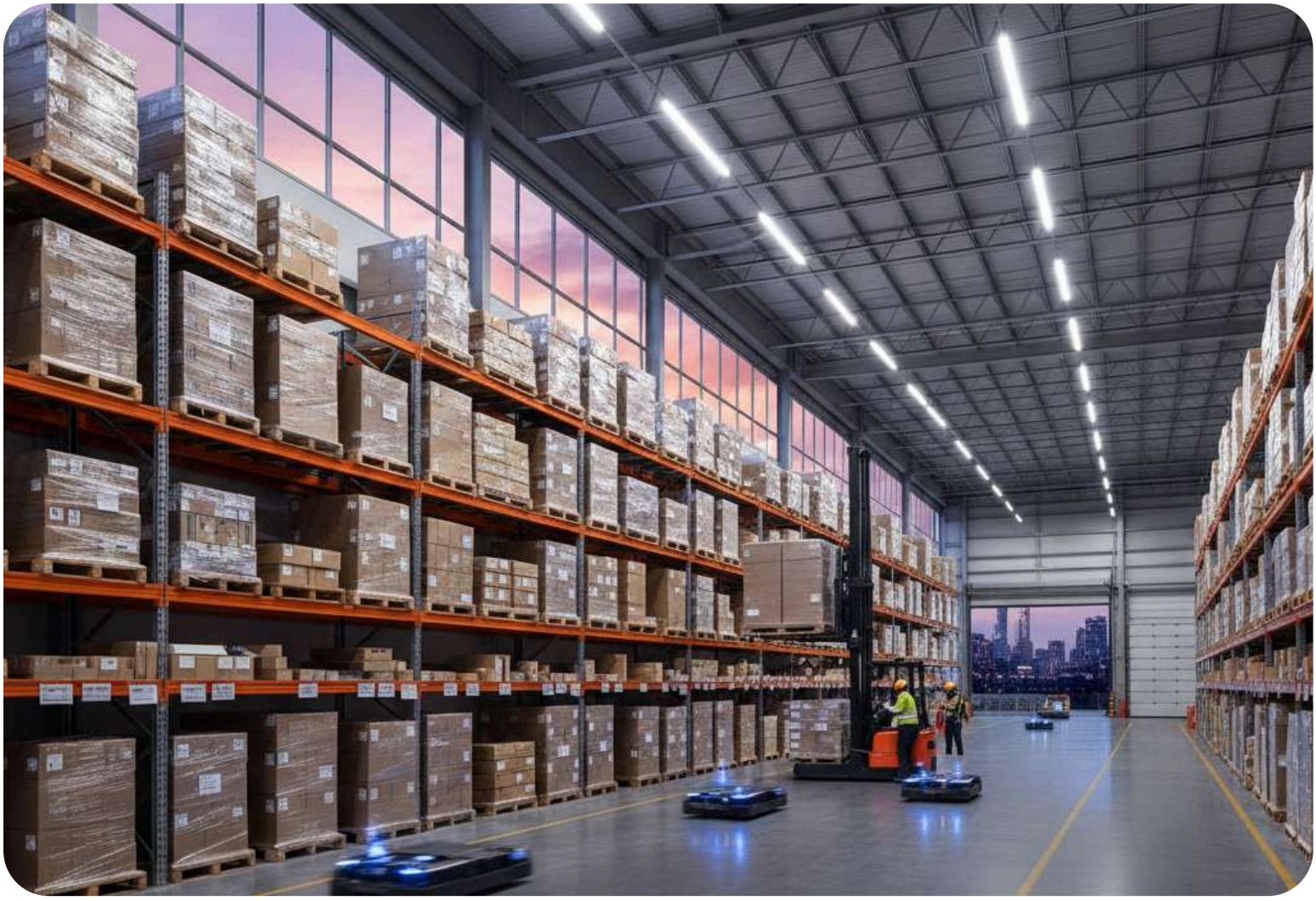
Nickel-plated brass grounding tag

A nickel-plated brass grounding tag provides a durable and corrosion-resistant point for connecting grounding conductors, ensuring reliable earthing in electrical installations.

High current Terminlas

High current terminals are robust connectors designed to safely carry large electrical currents, ensuring reliable power transfer in industrial and heavy-duty applications.

POWER ELECTRICAL



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