

TECHNICAL DATA SHEET



SINGLE PHASE INDUSTRIAL SIREN – 1KM

Product Overview: The Industrial Siren is a high-intensity warning device designed for industrial, fire safety, and security applications. With its powerful motor and optimized acoustic design, this siren generates a clear, sharp, and high-decibel sound that reaches up to 1KM.

Built using heavy-duty aluminium casting, this siren ensures long-term durability and resistance to environmental conditions. The copper wire winding improves electrical conductivity and efficiency, while the 10,000 RPM high-speed motor ensures loud and immediate alert notifications. Designed for horizontal mounting, it operates on 220V AC power supply, consuming 170W with a 3A current draw.

1. GENERAL DATA :-

Manufacturer	Palladium Safety Solutions Pvt. Ltd.
Trade Mark/Brand	“PALEX”
Type	Single Phase Industrial Siren – 1km



2. TECHNICAL SPECIFICATIONS :-

2.1 :- General Specifications

Siren Type	Single-phase Industrial Siren
Operational Range	1 KM (1000 Meter)
Sound Output	High-Decibel Industrial Alarm
Body Material	Heavy-Duty Aluminium Casting
Body Coating	Anti-Corrosive and Weather-Resistant Finish
Mounting Type	Fixed Horizontal Mounting
Fitment	Single-Headed

2.2 :- Electrical & Power Specification

Power Supply	220V AC, 50Hz
Motor Type	High-Speed Induction Motor
Motor Power	1/4 HP
Rated Power Consumption	170 W
Current Draw	3 Amp
Winding Type	Copper Wire
Internal Resistance	Optimized for Efficient Power Flow
Insulation Type	Class B Insulation (Up to 130°C)

2.3 :- Mechanical Specifications

Rotational Speed	10,000 RPM
Weight	Approx, 4kg
Colour	Gray
Mounting Orientation	Horizontal
Siren Head	Single
Construction Durability	Shock-Resistant, Vibration-Proof

2.4 :- Acoustic Performance

Sound Output Distance	1 KM
Decibel Rating (at 1m distance)	120-130 dB

Frequency Range	Optimized for high-alert sound transmission
Sound Clarity	High-Fidelity, Sharp, and Distinct Sound
2.5 :- Environmental & Safety Standards	
Operating Temperature Range	-5°C to 60°C
Storage Temperature Range	-5°C to 60°C
Weather Protection	Designed for Indoor & Outdoor Use
Ingress Protection Rating	IP54 (Dust & Splash Resistant)
Overload Protection	Thermal Overload Protection Integrated

3. KEY FEATURES :-

- High-Performance Sound Output – Emits loud and clear alert sounds up to 1 KM range, ensuring effective warning.
- Durable Construction – Made with heavy-duty aluminium casting, providing shock-resistant and corrosion-proof performance.
- Powerful Motor – Equipped with a 10,000 RPM, 1/4 HP induction motor for optimal sound intensity.
- Efficient Copper Winding – Enhances electrical conductivity and ensures long operational life.
- Energy Efficient – Operates at 170 W power consumption with a 3A current draw, balancing performance and energy use.
- Weather-Resistant Design – Designed for both indoor and outdoor applications, with an IP54 rating for dust and splash resistance.
- Simple Installation & Maintenance – Horizontal mounting system with easy wiring integration.

4. APPLICATIONS :-

- Fire Safety & Emergency Evacuation – Used in Fire alarm systems for early warning and evacuation procedures.
- Industrial & Manufacturing Plants – Alerts workers of machine startup, operational hazards, or shift changes.
- Security & Intruder Alarms – Integrated with security systems to deter unauthorized access.
- Public Address & Warning Systems – Used in military bases, factories, and public infrastructure for announcements.
- Disaster Warning Systems – Functions as an emergency siren for flood, earthquake, or other hazard alerts.

5. WARRANTY :-

1-Year Manufacturer's Warranty for Defective Components.

PALLADIUM SAFETY SOLUTIONS PVT. LTD.

An ISO 9001 : 2015 Certified Company

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