

Article Overview

A meter box measures electricity usage, while a distribution box distributes and protects electrical power across circuits.

Meter Box

A meter box is an enclosure designed to house the electricity meter and related service connections. It serves as the formal interface between the utility power supply and the consumer's internal electrical system, typically installed at the point of entry or on an exterior wall for easy access. Its main functions include measuring energy consumption for billing, protecting the meter from weather and tampering, and allowing authorized utility access for inspection and maintenance. Meter boxes may also include anti-theft devices depending on local requirements .

Distribution Box

A distribution box (also called a distribution board or breaker panel) receives power from the main supply and distributes it to multiple branch circuits within a building. It is usually installed indoors in service rooms or accessible locations. The distribution box houses protective devices such as MCBs (Miniature Circuit Breakers), RCCBs (Residual Current Circuit Breakers), or RCBOs to safeguard circuits against overloads, short circuits, and leakage currents. Its primary purpose is to control and manage electricity flow to lighting, appliances, and equipment while ensuring safety .

Key Differences

- o Function: Meter box measures electricity; distribution box distributes and protects circuits.
- o Location: Meter box is often outside; distribution box is usually inside.
- o Components: Meter box contains the meter; distribution box contains breakers, fuses, and protective devices.
- o Purpose: Meter box ensures accurate billing and utility monitoring; distribution box ensures safe and controlled power distribution .

Types of Distribution Boxes

Distribution boxes can vary based on application:

- o Main Distribution Board (MDB): Central hub for distributing electricity to multiple sections.
- o Sub Distribution Board (SDB): Transfers power to specific areas like garages or parking lots.



Electric meter box distribution box distribution meter

o Meter Panel: Combines metering and distribution functions for residential or commercial use .

Understanding the distinction between these two enclosures is essential for safe electrical installation, maintenance, and compliance with regulations. Proper selection and placement ensure both accurate energy measurement and reliable circuit protection.

A distribution board (also known as panelboard, circuit breaker panel, breaker panel, circuit breaker, electric panel, fuse box or DB

Why Distribution Boxes are Essential 2. Components Inside an Electrical Distribution Box

The electricity meter installed in the electricity meter box belongs to the "metering box", which has anti-theft

A commonly used distribution box contains doorbells, earth leakage devices, timers, or contact breakers. However, the

Distribution boards (generally only one in residential premises) usually include the meter (s) and in some cases

110V Portable Power Distribution Box, Electricity Meter Breaker Socket Distribution Box with 4*NEMA 5-20 Outlet Panel, IP54

The meter box, or distribution board, is the center of your electrical system. It's where your

Below is a Wiring diagram of the distribution board, Single phase electric supply from electric pole and

These boxes house various circuit breakers, protective devices, and sometimes meters, which collectively manage and distribute

An electrical distribution box is a centralized unit responsible for distributing electrical power across multiple circuits within various

Understand the difference between meter boxes and distribution boxes, their roles, safety

An Australian standard meter box is an electrical metering enclosure designed to house electricity meters, protection

Electric meter box distribution box distribution meter

The meter box is a special box for electricity metering, such as ammeter, watt hour meter, power meter,

A power, distribution, submetering, and meter box are all types of electrical enclosures that

Discover the key differences between distribution boxes, distribution boards and electrical enclosures to choose the

Residential Electric Meter Box Wiring Diagram Guide Understanding how to safely set up the main connections of a home's power

Web: <https://kremgroup.co.za>

