



Power Distribution Box for Testing Equipment

Article Overview

Power distribution boxes (PDBs) provide safe, organized, and flexible power delivery to multiple devices, with options for custom configurations, modular designs, and industrial-grade safety features.

Overview

A power distribution box (PDB) is a device that distributes electrical power from a single source to multiple outputs, allowing testing equipment or other devices to operate safely and efficiently. PDBs are commonly used in industrial testing, laboratories, construction sites, and automotive applications. They can handle various voltages and currents, include circuit protection, and may be designed for portability or permanent installation .

Key Features

- o Multiple Outlets: Modern PDBs can include standard AC outlets, high-current outlets, and USB ports for charging devices simultaneously .
- o Circuit Protection: Built-in breakers or fuses protect connected equipment from overloads and short circuits .
- o Weather Resistance: Some units are designed with angled covers and protective enclosures for outdoor or harsh environments .
- o Custom Configurations: Engineering teams can design PDBs to meet specific voltage, current, and outlet requirements, including labeling, documentation, and modular assembly .
- o Portability and Stacking: Certain models allow easy transport and stacking for jobsite use .

Custom and Modular Solutions

For specialized testing setups, custom PDBs can be designed to match exact specifications. Companies like Segue Manufacturing offer custom control panels and PDUs with full documentation, labelling, and testing services, ensuring compatibility with your equipment and simplifying maintenance . Modular systems, such as those from AKE Technologies, allow integration of robotics, monitoring systems, and flexible assembly for automated or semi-automated testing environments .

Off-the-Shelf Options

For general use, suppliers like McMaster-Carr provide a wide range of PDBs suitable for connecting equipment to generators or other power sources, with options for same-day or next-day delivery . Lind Equipment offers jobsite-focused PDBs with multiple AC and USB outlets, weather protection, and easy serviceability .



Power Distribution Box for Testing Equipment

Choosing the Right PDB

When selecting a PDB for testing equipment, consider:

- o Voltage and Current Requirements: Ensure the PDB supports the total load of your devices.
- o Number and Type of Outlets: Match the outlets to your equipment's plugs and power needs.
- o Safety Features: Look for circuit breakers, fuses, and protective enclosures.
- o Environment: Choose weather-resistant or portable units if used outdoors.
- o Customization Needs: For complex testing setups, custom or modular PDBs may be necessary. By evaluating these factors, you can select a PDB that ensures safe, reliable, and efficient power distribution for your testing equipment.

We provide you with information on our distribution boxes for download. Download our product catalog for

Get reliable temporary power distribution and construction lighting solutions for your worksite needs with

Understand distribution boxes (DB boxes) in 5 minutes. Learn about types, components, functions, and uses. Find

Test Benches and Laboratory Equipment. Uninterrupted Power Supply. Special OEM Application. Need

Our assurance, testing, inspection, and certification services help deliver dependable power transmission

Learn what a power distribution box is, how it works, key components, types, and why it's vital for safe and efficient

Master stage power distro box selection with proven strategies from industry pros. Get expert tips on safety, setup, and

A power distribution unit (PDU) is a device fitted with multiple outputs designed to distribute electric power, especially to racks of

Electrical distribution boxes for modular power distribution and installation. Flexible distribution solutions for

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



Power Distribution Box for Testing Equipment

Power Distribution Box, 110V Electricity Meter Electrical Box with NEMA 5-20 Power Outlet Pane, IP54

We offer a wide product portfolio of power distribution boxes and other main power distribution solutions. We can offer you combined

What are Distribution Boxes and Their Importance? What are Distribution Boxes and Their

Discover power distribution boxes (hard wired) from TE that are designed for flexible, cost-effective

Test equipment for the automotive industry: Powerbox and Converter-Box from Stankowitz

The power distribution network is the "spinal cord" of complex equipment, powering measurement systems and DUTs. As an ATE

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

