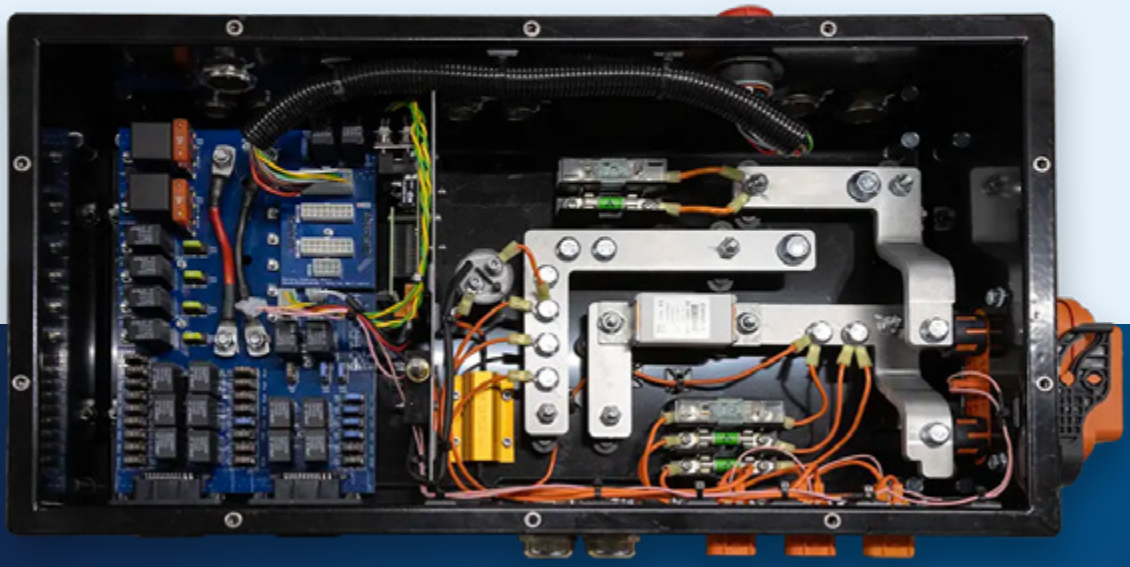
DOT ROBOT

Power Distribution Unit **(PDU)**

- Versatile power distribution: dedicated high-power (200A) and low-power outputs
- Smart power management with pre-charge & discharge
- Built-in HVIL & IMD for maximum safety
- Lightweight aluminum housing with IP66 protection



“Designed for safety, controlled power and reliable performance: an essential component for modern electrical systems.”

The Power Distribution Unit is at the heart of many high power electrical systems. It offers safe and reliable power and communication distribution to and from any component and system throughout vehicle, machine or robot. Our PDU’s are specifically designed for DC high voltage applications (nominal 96V, up to 110V) and include fuses, contactors, busbars, and low voltage distribution.

The smart power link

This PDU controls how power is distributed across your system, with dedicated outputs and built-in protection. Ensuring optimal performance for every component. Fewer failures, less energy loss, and complete control over your electrical setup.

Power you can rely on

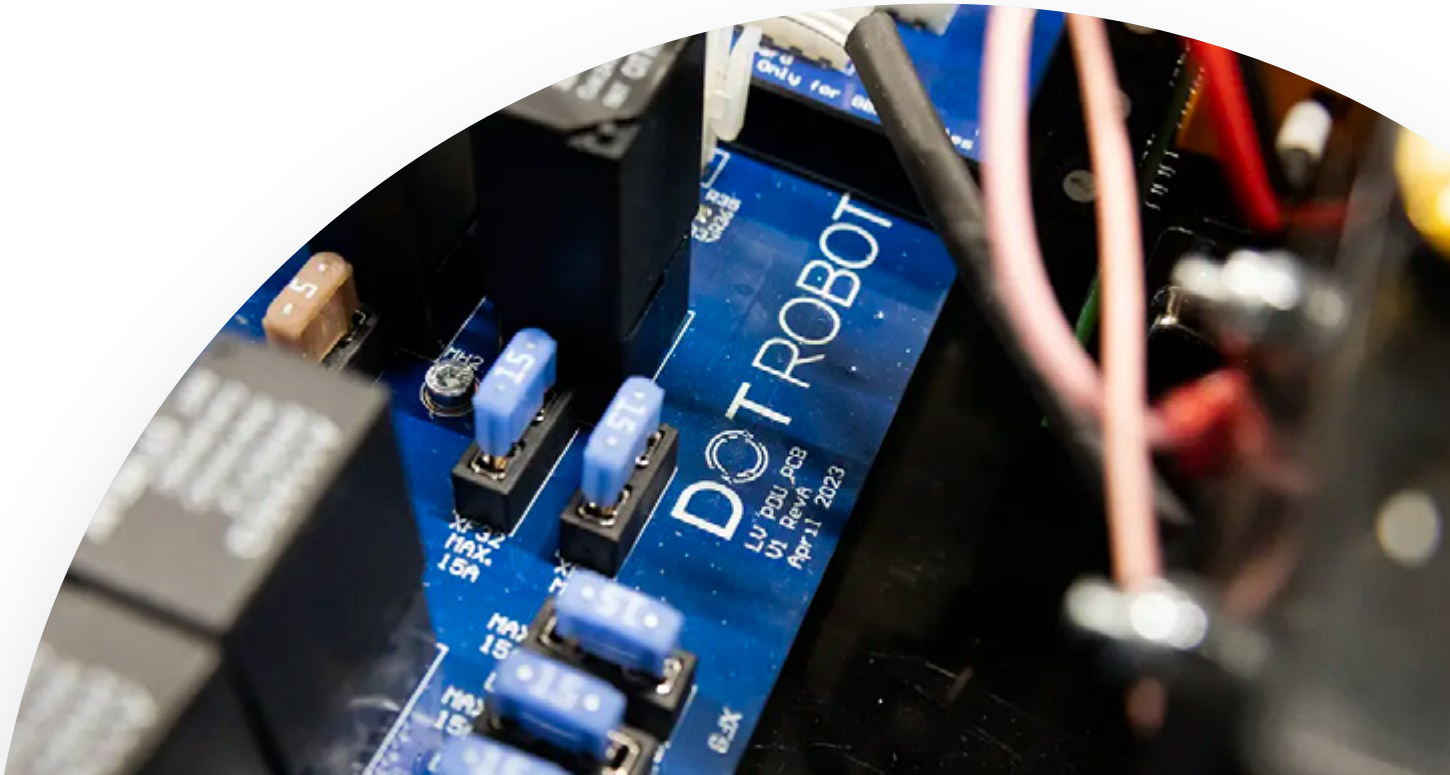
No failures, no downtime - just seamless performance. Designed for stability and efficiency, ensuring your system runs smoothly under any condition.

Small size, big performance

A compact design with versatile connections, fitting seamlessly into various systems without compromising power or safety.

Future proof investment

Built to last and meet the latest standards. Less maintenance, fewer replacements, and maximum efficiency; an investment that pays for itself.



Technical Specfications

Electrical specifications

Rated HV input voltage	96 VDC
Maximum HV input voltage	110 VDC
Rated LV supply voltage	12 VDC
Maximum LV supply voltage	14 VDC
Activation voltage HV relay	9 VDC
Release voltage HV relay	1.2 VDC
Maximum HV auxiliary / pre-charge output	6 A
Maximum HV high power output	200 A
Maximum HV low power output 1	40 A
Maximum HV low power output 2	60 A
Includes integrated HVIL	☑
Insulation monitoring (IMD)	☑
Controlled discharge circuit	☑

Mechanical specifications

Mounting connections	M6x28 mm
Removable cover connections	M4x12 mm
Dimensions (L x W x H)	260x208x65.2 mm

More technical ins and outs?

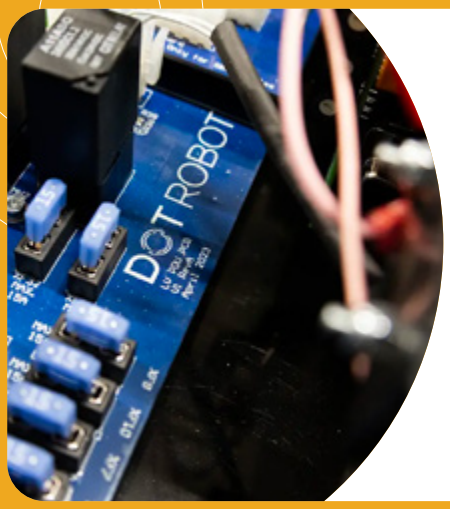
Looking for more detailed technical information? Please download the Product Data Sheet, by scanning the QR code.

Areas of application

Electric Vehicles

Electric vehicles need stable and efficient power to run safely. The Dot Robot PDU prevents surges and failures, ensuring seamless energy flow.

Leading EV manufacturers use this PDU to optimize performance and extend battery life - a futureproof power solution for modern mobility.



Process automation

Factories and automation rely on uninterrupted power to keep production running. The Dot Robot PDU prevents surges and failures in your machines, ensuring stable operation and lower maintenance costs. In a fast-moving industry, reliability is key.

Reliable Power in Extreme Conditions

Heavy-duty machines need stable power to handle extreme loads. The Dot Robot PDU delivers up to 200A, ensuring safe, uninterrupted operation.

With IP66 protection and a durable aluminum housing, it withstands dust, moisture, and vibrations, reducing failures and maximizing uptime.

Customizable to fit any application

Every system has different power distribution needs. The Dot Robot PDU is designed for flexibility, allowing seamless integration into electric vehicles, industrial machines, and robotic systems.

With its modular structure and multiple high-voltage outputs, it can be adapted to various configurations. Whether you need a standalone unit or deep integration into your system, the PDU provides a reliable and efficient power solution tailored to your requirements.

Van Mourik Broekmanweg 4
2628 XE Delft
The Netherlands

+31 (0) 15 123 45 67
info@dotrobotsystems.com

We have more to offer than this product. Please visit our website to learn more about our offering and how you can benefit.

www.dotrobot.nl