



PowerForge is a powerful platform for designing, exploring and comparing power converter designs. Thanks to multidisciplinary integration, PowerForge empowers development teams with a unique tool for designing lighter, smaller and more efficient converters in record time.

Centered around the engineer's workflow, PowerForge offers a **seamless experience** from product specification stages to trade-off of most complex multilevel topologies and sizing of passive and active components.

# **Key Benefits**



# Design cutting-edge converters

Lighter
Smaller
More efficient



# Reduce time-to-market

From specification to design in minutes

Ready-to-use simulation files



# Streamline your design workflow

All-in-one platform for early stage design

Real-time multi-site collaboration

#### **WORKFLOW**





**EXPLORE** 



COMPARE AND CHOOSE



**FURTHER PRODUCT DEVELOPMENT** 



# **PowerForge Features**

## Bidirectional conversion stages from kW to MW

- Non-isolated DC/DC
- · 3-phase DC/AC

## Automated design generation from 2-level to multilevel

- · 3-level Neutral-Point Clamped (3L-NPC)
- · 3-level T-type (3L-T-type)
- Stacked MultiCell (multilevel SMC)
- Parallel interleaved Flying Capacitor (multilevel FC)

# Libraries of public references

- Discretes and modules of IGBTs & MOSFETs.
- · Magnetic powder alloys & ferrites
- · Plastic film capacitors
- Thermal interfaces

# Private references in library

- Private discrete and module (leg, T-type, NPC) library references, providing loss data in Plecs XML format
- Private semiconductor package footprints

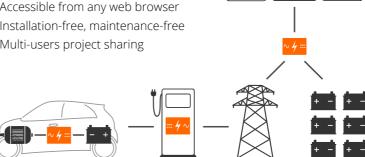
# Ready-to-use file exports for industry-standard software

• PSIM & PLECS export (simulation models and semiconductor loss data)

· FEMM 2D magnetics models

#### Cloud access

- · Accessible from any web browser
- · Installation-free, maintenance-free
- Multi-users project sharing







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