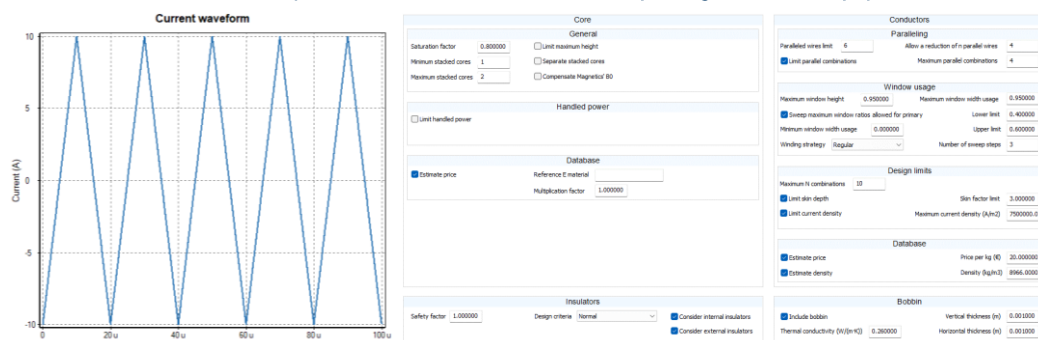


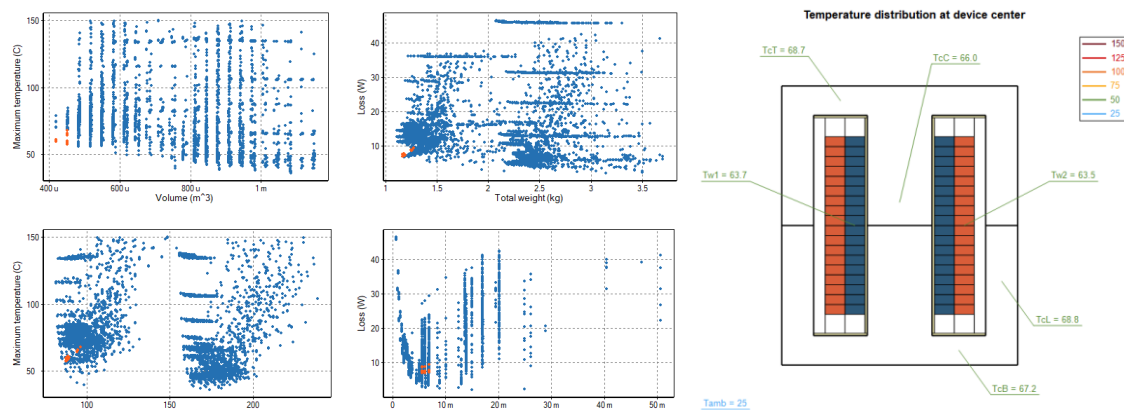
A single magnetic design tool for experts and newcomers

Speed up your magnetic design in 3 steps

1 Enter the minimum required data or manually adjust every parameter

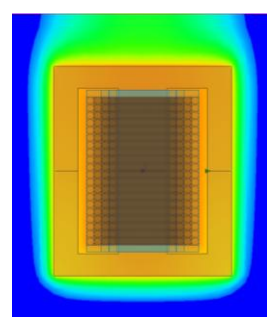
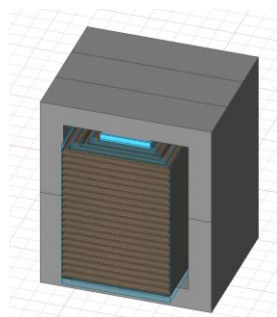


Select the device that best suits your needs



3 Get detailed results and automatically export to FEA tools

Parameter	Units	Value
Magnetizing inductance referred to primary	mH	9.34
Primary leakage inductance	nH	458
Secondary leakage inductance	nH	577
Secondary leakage inductance (referred to primary)	nH	577
Effective current at primary side	A	5.77
Current density at primary side	A/mm²	0.463
Effective current at secondary side	A	5.77
Current density at secondary side	A/mm²	0.463
Primary winding DC resistance	mΩ	7.54
Secondary winding DC resistance	mΩ	9.5
Primary winding loss	mW	285
Secondary winding loss	mW	359
B peak	mT	35.9
Core loss	W	1.02
Primary winding weight	kg	0.807
Secondary winding weight	kg	1.02
Core weight	kg	3.02
Total weight	kg	4.85



Versatile

A single design tool for experts and newcomers

Adaptable

Multi-objective optimization

In-depth

Not a black-box design. Provides full information of the device

Precise

Automatic 3D and 2D model generation for FEA tools

Scalable

From low to high power magnetics in a single tool



For every user

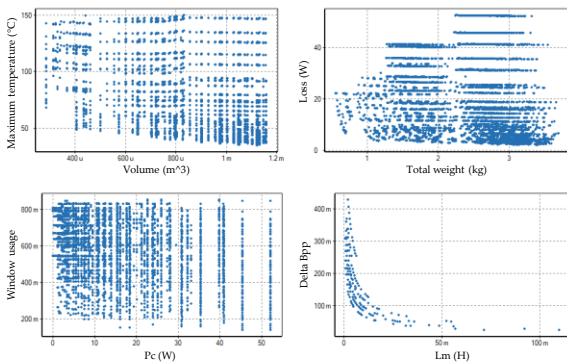
If you are an expert magnetic designer: tweak every design parameter to fit your needs.

If you are new to magnetic design or are in a hurry: Let the tool decide everything for you!

The interface is divided into several sections: Core, Conductors, Window usage, Design limits, Database, Insulators, and Brubbin. Each section contains various input fields and checkboxes for configuring the magnetic device design.

Powerful intuitive interface

The tool allows the selection of up to 8 figures of merit at the same time to achieve the device with the best performance for any application.

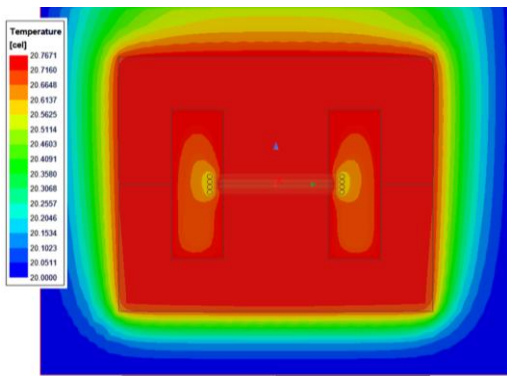


You can achieve the smallest, the lightest, the cheapest or the most efficient device or any trade-off between any figure of merit. Select the device that best fits your needs!

Temperature distribution

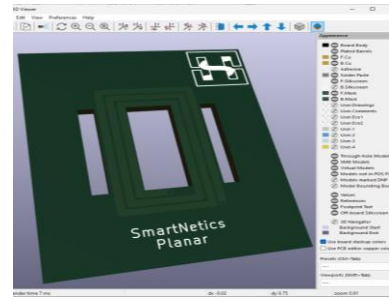
The temperature distribution in core, windings and insulation is included in the model, to ensure the selected device will be able to work within imposed limits. Natural and forced convection are available.

The temperature can also be verified in Ansys-Icepak thanks to the automatic export options.



Planar magnetics

On top of regular magnetics, wound using wire around a core, you can design planar magnetics using PCB tracks.

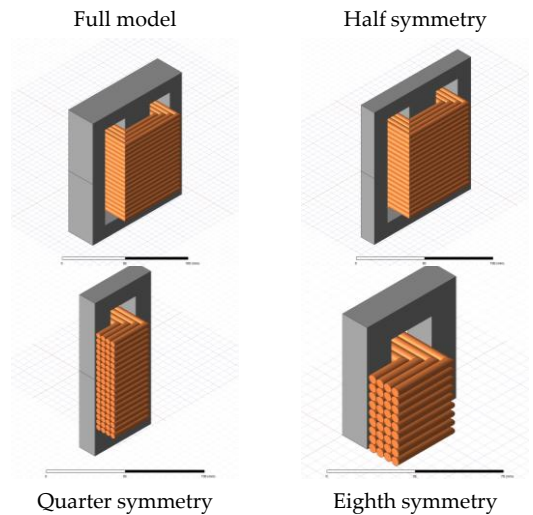


Drastically reduce your design time by exporting your PCB to KiCad. Everything is reproduced as you selected in SmartNetics: traces, vias, core holes and stack-up.

Optimized accurate simulations

The 3D model accurately represents real wires, allowing a realistic simulation of electric and magnetic fields and temperature distribution.

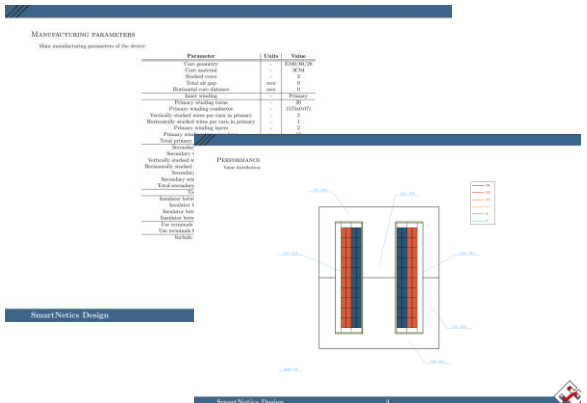
Symmetries are considered to save simulation time and resources while maintaining a high accuracy.



Report

Automatically generate a high-resolution PDF report with everything you need: performance indicators, materials to buy, manufacturing parameters, inputs used, etc.

You can even configure what to include and personalize it with your own logos and comments.



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