

All you need to know 
ALPHA-NUMERICS

Electronics Cooling Specialist

We build the bridge between science and engineering

ALPHA-Numerics GmbH

Who are we? **What** do we offer? **Why** are we the right partner for you?



Hello,

My name is Tobias Best and I am the Managing Director of ALPHA-Numerics GmbH.

I have been working in the field of electronics cooling for almost 30 years now, selling industry-specific CFD software and advising companies on the optimization of cooling options in electronic systems.

I am pleased to present my company and our range of services in this flyer. Should any questions remain unanswered, please do not hesitate to contact my team or me at any time.

Thank you very much for your time 😊

ALPHA-Numerics GmbH * Römerstraße 32 * 56355 Nastätten * info@alpha-numerics.de

We simulate the heat paths with CelsiusEC, a software from Cadence

Who are we?

As specialists in electronics cooling, we not only sell the relevant software, but we also know how to use it efficiently and successfully and share our expertise with you.

We train your engineers, developers and IT specialists in the use of CelsiusEC software in customized workshops and training courses. We also offer individual training courses - based on the customer's own product data.

- 01 ALPHA-Numerics
- 02 Software Reseller
- 03 Simulation Service Provider

ALPHA-Numerics GmbH

We are expert in a specialized field that is indispensable in any electronics development. And we are not just talking about hardware design (PCB layout & assembly), but also about the constructive design of an electronic device, i.e. the enclosure and mechanical construction, the choice of materials, the surface coating, the device architecture and thus the complete cooling strategy.

Dealers of CelsiusEC

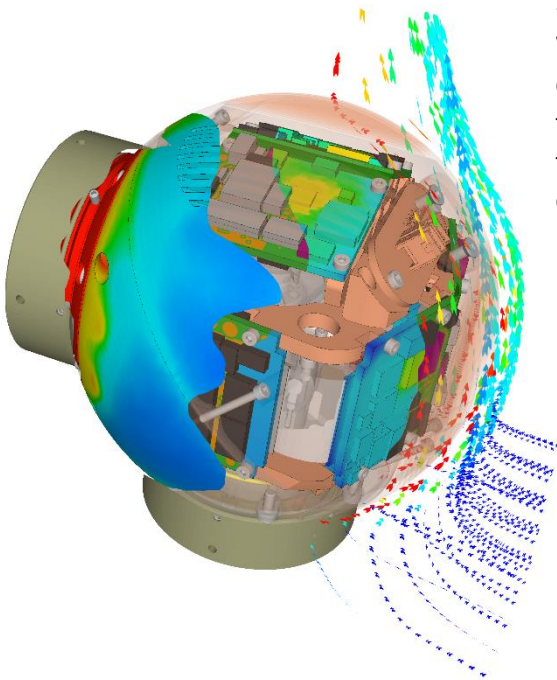
CelsiusEC is an industry-specific simulation tool and is tailored for developers of electronic devices. This becomes clearly visible, when you look at the practical design of the graphical user interface and the many little helpers for modelling electronic devices. As a Reseller, you have to be able to do more in this technically very demanding special field than just assemble off-the-shelf quotations.

Software training and technical hotline

ALPHA-Numerics trains software users using its own documentation. This goes far beyond standard software training. And even after this, our engineers remain available to you at all times via hotline or e-mail support.

Simulation service provider

With almost 30 years of experience in the industry, we have seen almost every challenge in the cooling of electronic devices and have accompanied the solution. This keeps us close to the practical side of things and allows us to develop our skills on a daily basis. We are also happy to offer you this expertise as a simulation service provider and consultant.



01 ALPHA-Numerics GmbH - Who are we?

ALPHA-Numerics is an engineering office near Wiesbaden and specialises in the “electronics cooling” market. Since the company was founded, we have worked for several hundred companies as an extended workbench and offer our experience and expertise in building virtual simulation models that simulation of the heat paths as well as the evaluation and joint optimization of the cooling system.

Most of our customers come from the Automotive and Transportation Industries as well as the Automation Technology. However, we also offer a wealth of experience in simulation and Project optimization in the Medical Technology, Telecommunications, Lighting Technology and Powertooling Industry.



- Main sponsor and speaker at the CoolingDays
- Organizer of webinars for further education
- Publication of many technical articles
- Free online seminars on CelsiusEC with test license
- Editor of various training documents
 - Electronics cooling
 - Creation of physically correct simulation models
 - Possible applications for CelsiusEC
- Technical partner in research projects

Based on our experience in dealing with the CelsiusEC software, we have also proven to be very successful dealer of the CelsiusEC software.

Here we support the countries in German and English:

- Germany
- Austria
- Switzerland
- Poland
- Hungary
- Slovenia
- Czech Republic
- Romania
- Serbia

However, our good reputation has now led us to also include our customers' development sites in China, India, USA or Singapore as software trainers and technical hotline partners in our field of activity record.

Our strength lies in the expertise, availability, speed, flexibility and quality of our Work.

02 Software dealer with depth

As a reseller of CelsiusEC software, we are the first port of call for you! We not only offer you the software at attractive prices, but you can also involve us extensively during your software evaluation and benefit from our wealth of experience.

To get you started, we regularly offer various free webinars (each lasting approx. 30 minutes) on our homepage. Here you can get a first impression of ALPHA-Numerics, the software, the order simulation and the underlying physics.

In the second step, we offer a free two-hour course (compact seminar) followed by a free trial of CelsiusEC. Although this compact course does not replace training, it makes it much easier to get started with the test phase. During the subsequent test phase, we will be at your side with help and advice so that you can not only work through the tutorials, but also simulate and analyse your own first project.

You can find the dates at any time on the homepage of our website www.alpha-numerics.de!

If you decide to use CelsiusEC, training (8 hours, spread over 2 days online) is a prerequisite for efficient work in the future and for access to our technical hotline. In order to maintain the availability and quality of our support, only trained users are authorized to use it.

If you have previously used ALPHA-Numerics as a service provider, we will be happy to transfer all old project data to you and then use such a customer model for extended training days on the software and for consolidating the physics fundamentals.



03 ALPHA-Numerics as a simulation service provider

A reliable partner for your projects

"Our 8-hour service day currently costs € 1.300. But our customers particularly appreciate the fact that we need between 2 and 5 days for typical services from data import to modelling, networking, calculation and documentation. Variant simulations are usually much faster due to the already existing basic model. This makes us faster and some euros cheaper than any other competitors. This professional, flexible and fast way of working offers you reliable results in the short term, enabling you to make well-founded decisions regarding thermal management in your development."

Tobias Best, Managing Director of ALPHA-Numerics GmbH

Typical service procedure

- Online kick-off meeting for a short project presentation and distribution of tasks for data collection (differentiated into data requirements for a quotation, data requirements for project simulation)
- Mutual signing of an NDA (preferably specified by the customer)
- Data receipt (step, project task, POI) for cost estimation with subsequent quotation preparation
- Ordering and data delivery for project simulation
- Project start at ALPHA-Numerics, i.e. model development in exchange with the customer
- For new customers, usually an interim meeting to check the model together before the calculation via the dual control principle.
- Networking, calculation and documentation of the results
- Online meeting to explain the results and discuss the optimization options for the thermal budget.

Flat-rate project offer or invoicing by the hour?

The customer has the choice. We are happy to provide you with an all-inclusive project offer if the task can be clearly outlined and the input data no longer changes. Otherwise, we keep a time log, which the customer is regularly informed about.

An initial project meeting is always free and non-binding - it's just an email away 😊



Römerstrasse 32
56355 Nastätten

Tel: +49 6772 969 3470
info@alpha-numerics.de
www.alpha-numerics.de