

Turnkey Solutions

for Optical, Power and Thermal Management Technologies

- Design Services
- Prototyping Capabilities
- Manufacturing & Subcontracting
- Test, Tool & Validation
- In-Circuit Test (ICT)
- Functional Circuit Test (FCT)





- Optical Technologies
- Power Technologies
- Thermal Management



AMS Technologies is Europe's leading solution provider and distributor for Optical, Power and Thermal Management Technologies

WHERE TECHNOLOGIES MEET SOLUTIONS

For more than 30 years, we at AMS Technologies have been supporting the European market with leading, innovative technologies and products that have allowed our customers to take prime position in their chosen markets.

AMS Technologies is a leading solution provider and distributor of high-tech, leading-edge components, systems and equipment, with more than 30 years of experience to date and currently serving more than 2000 European customers.

We are the specialists in both componentry and complete solutions for Optical technology, Thermal Management and Power Technology fields, with access to and long standing relationships with the most advanced manufacturers in each of those fields. Drawing extensively on our experience in each of these differing technologies, and coupling this with our broad system-level competence, we are able to offer seamless and comprehensive solutions incorporating complementary aspects from all three key technology fields.

With an appropriate technical education, an element of entrepreneurial spirit and many years of design and consultancy expertise, our sales engineers can rapidly comprehend system requirements and provide you the customer with a solution that goes way beyond a simple understanding of our product datasheets. We take active involvement in the design cycle, defining and re-defining your specifications, and

leading in many cases to highly specific, customized products and solutions. Helping you to effectively outsource your production line, we can even provide you with the necessary leading turnkey contract manufacturing services in our key competency fields.

AMS Technologies has been delivering solutions into a variety of high-tech markets, including renewable energies, medical, defence & aerospace, research & scientific and various other industrial segments. Our customer base consists of Europe's largest leading technology corporations, a network of universities and research institutes as well as the most promising start-ups.

We thrive by working in a 'customer first' environment. Our pan-European customers are serviced from a network of local offices in Germany, the UK, France, Italy, Spain, Poland and Sweden, with a focused operations and logistics centre located in Munich, Germany.

Our commitment: Identifying the best solution for your project enabling you to become your customers' first choice!

Your AMS Technologies team



Optical, Power and Thermal Management Technologies represent the biggest technological challenges facing any engineer.

OUR SOLUTION APPROACH

AMS Technologies’ solution approach has helped hundreds of customer projects to move from concept to production. Helping you to understand our capabilities, we invite you to browse a list of the many projects that we have successfully completed over a timeframe closely approaching 30 years.

Our three key competencies Optical, Power and Thermal Management have no logical bits and bytes, nor industry qualification standards. Hence the design of a system and the choice of the right technology, supplier and products can only be based on knowledge and experience in those fields.

There are manifold fields of applications in our key markets

- Medical
- Industrial
- Renewable Energies
- Research & Scientific
- Defence & Aerospace

where we serve

OEM customers with

- Consulting
- Designing
- Prototyping
- Validating/Testing
- Turnkeying

Endusers B2B with

- Demonstrating
- Installing
- Training
- Servicing
- Repairing

AMS Technologies has built a comprehensive knowledge base in those three key competencies, enabling us to provide customers with complete solutions. Over and above the mere product support for standard products, our solutions can include:

- The development together with the customer of specification sheets for customized components, subsystems, modules and systems, all based on customer needs
- Effective project management of any customized product development
- Higher level design services for system-level prototypes
- Interdisciplinary system-level integrated design comprising all three key competencies:
Optical, Power and Thermal Management Technologies
- Appropriate subcontractor selection and production support for system-level integration
- Proper vetting of technologies and suppliers
- Simulations and modeling of system-level designs
- Installation, training and servicing of equipment and instrumentation





Design Services for

■ Electronics

- Power Conversion (Switch Mode Power Supplies & Battery Chargers)
- Motor Control
- High Speed Connectivity
- Wireless Connectivity
- Communication Interface Design
- Human-Machine-Interface (HMI)
- PLC Modem

■ Embedded Software design

- FPGA
- Microcontroller
- Software PC/Linux

■ Thermal Management

- Heat Sinks and Cold Plates for Power Electronics, 100 W to 100 kW
- Photonics cooling conceptual planning, mW's – kW's
- Laboratory instruments stabilisation, +4°C – +95°C
- Thermoelectric energy balance analysis and system dimensioning
- Heat exchanger coil dimensioning, air-water, refrigerant evaporation and condensing, 50 W – 1 MW
- Water cooling circuit piping layout and instrumentation planning, 50 W – 1 MW
- Vapor compression refrigeration cycle design, 50 W – 10 kW
- CAD design of components and systems
- CFD modeling and simulations

■ Photonics

- Industrial LED illumination
- Fiber Management & Termination Systems
- Laser/LED/Lamp Driver adaptation

■ Hardware/Mechanical

- CAD design (Electronics, Thermal Management, Photonics Solutions, Box Build)
- Cost Reduction Engineering/Lifecycle Management Engineering based on customer's prior design

Prototyping Capabilities for

- PCB Assemblies
- Thermal Management Assemblies
- LED System assemblies
- Box Builds

Manufacturing/Subcontracting for

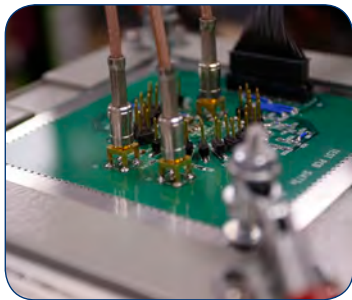
- Volume Production Management with Subcontractors
- Supply Chain Management of components, system level & spare parts





Test/Tool/Validation

- Test system development
- Process development
- Test system build
- Application software design (Integration into existing ERP environment)
- Implementation, installation, training, maintenance, repair



In-Circuit Test (ICT)

- Test fixtures manufacturing
- Test software development



Functional Circuit Test (FCT)

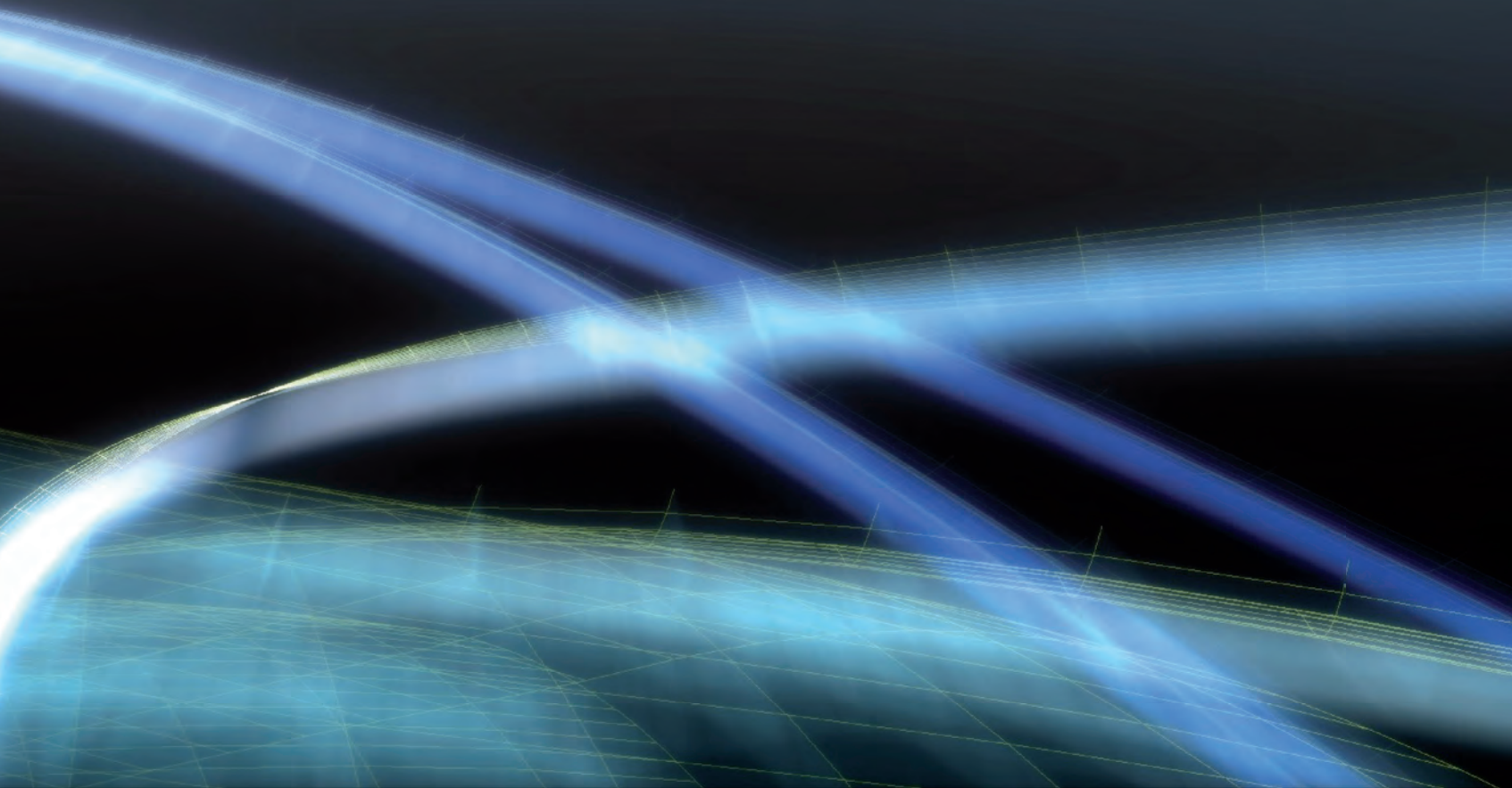
- Test systems (hardware) design and build
- Test applications development
- Thermovision test stand for power electronics



Certificates, Qualification and Standards

- **Designs according to**
 - CE, ENEC, UL, FCC, CSA, VDE, ATEX and others
- **Certificates**
 - ISO 9001:2008
 - ISO 14001:2009
 - ISO 13485 (MDD)
 - PN-N 18001:2004/OHSAS
 - ISO/TS 16949 in progress
 - ISO 27000
 - ENEC, CSA, NSF, AEO and C-TPAT
 - RoHS (2002/95/EC)
- **Workmanship standards**
 - IPC-A-600 / Bare PCB
 - IPC-A-610 PCBA
 - IPC/WHMA-A-620 / Cables & Harnesses
- **Test Capabilities**
 - EMI chamber
 - ESD burst and surge tests
 - Environmental chambers
 - Thermal imaging camera







amSTECHNOLOGIES

where technologies meet solutions

enabling your ideas.

Optical, Power and Thermal Management Technologies

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