

# Invented By you



PERFECTED BY CRYSBERG



**CRYSBERG**

FULL  
SCREEN:  
CTR+L

LUK FULL  
SCREEN:  
ESC





# Invented by you

## Industrial electronics solutions

Crysberg is an electronics company situated in Kvistgaard in Denmark. All the expertise used in industrial electronics is under one roof from problem analysis to idea, development through production of large and small series and testing, storage and after market service. A cooperation with Crysberg therefore gives more benefits for you. Crysberg's wide range of skills means that Crysberg can promise a wide range of tasks and fill the role as sparring partner, development partner and supplier - therefore you only need to cooperate with one supplier about the outsourcing of development, perfection and production of electronics solutions.

Our goal is process - and resource optimization, guaranteed delivery and high quality. The means to reach this goal is that Crysberg has a dedicated and highly professional and qualified staff in development, production, quality control and administration.

Crysberg's production includes a SMT in-line manufacturing line and a standalone SMT machine for prototypes and production of small series. Thus, we have an optimal position to offer you flexibility in production in relation to your needs and desires. This means that Crysberg guarantees delivery in time - regardless of the volume of the series.



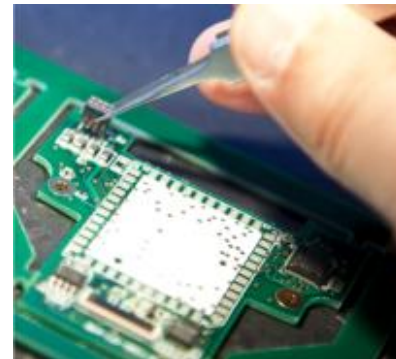


# A flexible partner

## A flexible partner

In our development work, preparation and production Crysberg is project-oriented. Depending on the specific task, contents and scope, we assemble a multidisciplinary project team consisting of a project manager, development engineers, manufacturing engineers, procurement officers, logisticians and customer support. Hereby we ensure that there always is focus on the customer's project.

Crysberg is also a strategic partner for development: At Crysberg development and production of prototypes are among our greatest strengths. We offer both SMT assembly as well as through-hole assembly and advanced box-build. We also offer cleaning and varnishing of printed boards (PCB) and subsequent water-proof encapsulating if desired.



## Certifications

**IPC-A-610/QCe:** PCB mounting takes place according to the international IPC-A- 610 standard that our operators are trained and certified for. We work after Class A, B or C. Crysberg was in the year 2010 certified according to the new QCe (Quality Compliance of Electronics Production) standard.

**ISO 9001:2000 and ISO 13485:** Crysberg's quality system is approved and certified to ISO9001: 2000.

**ISO 13485:** Crysberg is certified according to ISO 13485, which is a medical device standard. This procedure secures that the manufacturing of electronics is in accordance with European directives regarding traceability. This implies the keeping of detailed traceability protocols over the electronic components included in the finished electronics.

**ISO14001:** Crysberg is certified according to ISO 14001, which is an environmental standard.





# Our Expertise

**Development:** Electronics solutions are developed in close cooperation between you and Crysberg's development engineers. The development work takes place in phases and is guided by processes in accordance with ISO9001. A database IT tool ensures that there is transparency and a history recorded all the way in all parts of the project. The database tool also serves as a user-controlled archive of all relevant documents in the project. Crysberg makes a virtue of delivering development projects to agreed time and price and in accordance with the agreed specifications.



**Technologies:** The many completed development projects give Crysberg access to a toolbox of technologies within electronics, design, telecommunications, measuring and regulating equipment, WEB solutions, system design, databases, software etc. Innovative solutions in many cases have created technology, which subsequently has been patented.

**Production & procedures:** We produce everything in electronics from prototype production, 0-series to small and medium series production. Our production process is split in phases and processes, which are in accordance with DS/ISO9001, and according to ISO13485 if required by the customer. All output documents, as assembly instructions and parts lists are created and maintained in our internal project management system.

PCB layout and production technology: At Crysberg we have design engineers and production technicians, who daily interact and work closely together. We have a highly skilled staff, which both understands the functionality of the products and knows how the production works.

Fully automated electronic assembly of SMT: Crysberg has an overall SMT capacity of 52,000 components per hour after the installation of the new high-tech Siemens Siplace pick-and-place placement machine.

Manual electronics assembly: Our section for manual electronics assemblies consists of highly skilled assembly technicians with many years of experience in the electronics industry. All our assembly technicians are certified in the global Workmanship IPC-A-610 Class 3 (solder default) and under the ROHS Directive.

Cleaning, varnishing and encapsulation: At Crysberg we





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**Cleaning, varnishing and encapsulation:** At Crysberg we have extensive experience in cleaning, varnishing and potting of PCB's. Our cleaning and varnishing line can handle PCB's in a size of up to 30x25 cm. We use a 2K Polyuthan Voltatex CE 12 molding compound for all encapsulations.

**Box-Build:** Besides the development and mounting and test of PCB's we offer box-build. We can offer to manage the entire process from procurement of components and mechanical parts to coordinate the cooperation between the customers and subcontractors for the final test and delivery to the end-user.

**Testing:** We perform naturally thorough testing of all products before shipment. The testing equipment used is developed either under the customer specification requirements or made available to us by you. In connection with our automated test equipment, we can offer you test reports for each device.





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## About Crysberg A/S

Crysberg is a Danish engineering company that was founded in 1986. The basic idea is solving complex challenges in industrial electronics. Our customers base include a broad range of industries, which demand small or medium production runs of customized electronics solutions, where close dialogue and high quality are important parameters.

We develop and manufacture industrial electronics solutions to the financial sector, alarm & security, marine electronics, industrial control and medical device industry. In these industries there are requirements for traceability and high requirements for document management, and documentation of approved component manufacturers etc.

Compliance of these demands are important prerequisites to qualify as an approved electronics supplier. A well consolidated company that specializes in the developing and production of advanced industrial electronics solutions. The company employs 40 people and had a turnover in 2009 of 53 million DKK.

# CRYSBERG

## CRYSBERG A/S

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