



## Contact

### Primara Test- und Zertifizier-GmbH

Gewerbestraße 28  
87600 Kaufbeuren  
Germany

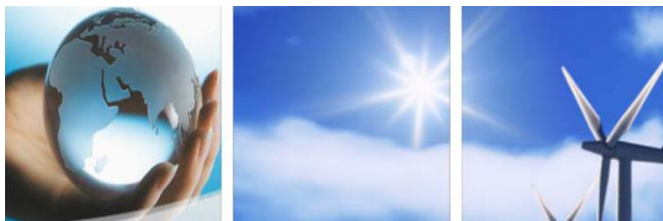
**Do you have any questions?  
We will be pleased to support you:**

**Tel.:** +49 (0) 8341 / 95 54 89 2  
**Fax:** +49 (0) 8341 / 95 54 89 4

**Email:** [info@primara.net](mailto:info@primara.net)

Please visit our website  
**[www.primara.net](http://www.primara.net)**

for more information on our services



## About us

### Primara Test- und Zertifizier-GmbH

As an independent test laboratory and certification body of electrical products and renewable generators we open the door to national and international markets.

The cooperation with Primara results in a higher value of your products and processes. We support your successful entry in the global market.

The sustainable development of safety and quality of your products as well as the smooth, uncomplicated and fast handling of conformity assessment is our main claim.

We are recognized by the German accreditation body DAkkS according to DIN EN ISO/IEC 17025:2005 and EN 45011:1998, to test and certify electrical products according to the current scope of accreditation.



## Quality Assurance Lifetime Calculation

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## Quality Assurance

We are specialized in the analysis of critical points of electrical assemblies and components as well as the lifetime analysis of power electronics in various industrial applications.

### We offer the following services:

- MTBF
- Lifetime calculation
- Efficiency measurement
- Usability, fit for use
- IR Thermography
- Weak-point analysis
- Compliance with customer specifications

We find the weak points of your product to keep failures and defects low and to increase the lifetime of your product. We will help you to improve your product in order to increase customer satisfaction and enhance your reputation permanently. This initial investment will have a lasting impact on your ROI.



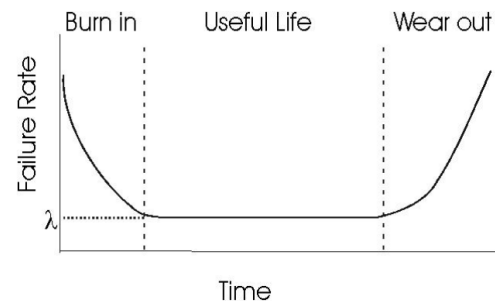
## PV-Inverters

### Analysis of lifetime and reliability

We calculate the lifetime and reliability of power electronics and thus enable you to determine the lifetime of your inverter.

### MTBF (Mean Time Between Failures)

With the help of MTBF calculations, we determine the mean time between failures of your product. We measure specific characteristics such as temperature, currents and voltages. To reflect MTBF times of PV applications as realistic as possible, we incorporate power and sun curves into our calculations.



## Functional Safety

### Safety review of circuits

Directives often require a reliability of safety circuits. We help you to carry out these calculations according to IEC 61508 and provide you with appropriate evidence.

## Efficiency

- Energy conversion efficiency measurement according to IEC 61683 and EN 50530
- EU, CEC Efficiency measurement
- MPPT Efficiency
- Standby-loss measurement
- Display accuracy
- IR Thermography

