

Power System Reliability Modeling

Failures can occur in any electrical systems causing disruption of operations. Especially, power supply failures cause system down-time & costly interruptions. Business-critical applications rely on ITC (data centers and telecom network and other important systems) and their continuous availability.


Monitoring the health of your power system can avoid failures and improve the total cost of ownership. Hence, dynamic insights into its condition are essential. Component reliability is the key to power supply monitoring.

Solution Benefits

- Real-time system diagnostics for your power supply
- Powerful system reliability-centric decision and quality assurance
- Easy to use and integrate in existing designs

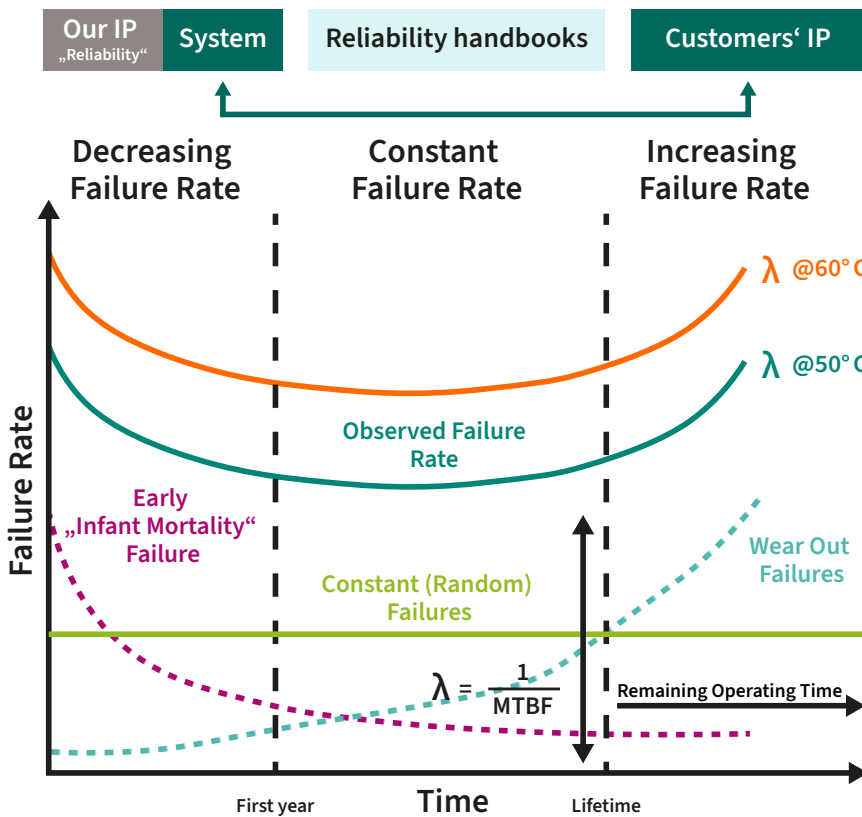
Target applications

- Data center, AI server, GPUs, telecom networks, IBC modules, DCDC converters, ACDC rectifiers



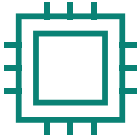
Problem:
The reliability of any electrical system is very much dependent on its mission profile

Solution:
Statistical models and real-time mission profile logging enable a recalculation of the actual failure rate



Introducing Power System Reliability Modeling with real-time power health monitoring and advanced telemetry functionalities.

Here are your benefits at a glance:



Apply real-time system diagnostics to your power supply

- Continuous processing of operation conditions (e.g. temperature, current, voltage) of the power supply (dynamic mission profile)
- Modeling of complete power supply design (BOM model) inside the power controller
- Reliability and change of MTBF/MTTF predictions based on BOM model and dynamic mission profile



Get a powerful system reliability-centric decisions and quality assurance

- Optimize the lifetime of redundant systems and make better maintenance decisions
- Get insights into your power systems with advanced mission profile logging features
- Access field data for quality assurance and design iterations
- Create an overview of the statistical state of health of devices in the field



Easy to use and easy to integrate into your design

- Every power topology and design (BOM) can be modelled/used
- Existing digital power controller infrastructure and tooling can be used
- Pin-to-pin compatible with current power controller infrastructure generations
- Support of engineering team and modelling experts

Power System Reliability Modeling enables real-time power supply health monitoring for business-critical IT systems. Customers can optimize power supply utilization and reduce maintenance costs and downtime risk, improving profitability. Customers can increase the lifetime of their infrastructures and enable optimized after-sales services/support.

For more information visit [our solution page](#).

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