

## **RELIABILITY EQUIVALENCE OF A PARALLEL-SERIES SYSTEM**

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### **Abstract**

This paper introduces three different types of the reliability equivalence factors of a parallel-series system consists of four independent and identical components. The lifetime of the system component is assumed to follow exponential distribution. The reliability function and mean time to failure are used to derive the different reliability equivalence factors of the system. The results presented here generalize those available in the literatures. Numerical study is given to illustrate how one can utilize the theoretical results presented.