

## Performance of Total Vector Error of an Estimated Phasor within Local Area Networks

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**Abstract :** This paper evaluates the Total Vector Error of an estimated Phasor as define in IEEE C37.118 standard within different medium access in Local Area Networks (LAN). Three different LAN models (CSMA/CD, CSMA/AMP, and Switched Ethernet) are evaluated. The Total Vector Error of the estimated Phasor has been evaluated for the effect of Nodes Number under the standardized network Band-width values defined in IEC 61850-9-2 communication standard (i.e. 0.1, 1, and 10 Gbps).

**Keywords :** phasor, local area network, total vector error, IEEE C37.118, IEC 61850

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