PMU Basic Specification

A Phasor Measurement Unit (PMU) is a device that provides as a minimum synchrophasor and frequency measurements for one or more three phase AC voltage and/or current waveforms. The synchrophasors can be single phase or symmetrical component values. The synchrophasor and frequency values must meet the general definition and minimum accuracy required in the IEEE Synchrophasor Standard, C37.118-2005. The device must provide a real-time data output which conforms to C37.118 requirements. The manufacturer must provide test data to confirm compliance with C37.118.

The PMU may also provide measurements of other analog waveforms and digital signals, including raw synchronized samples, and may also record data locally. Such functions are optional but if included, their specification shall be defined in the user's manuals and device data sheets.

The PMU may perform other functions, such as relaying, metering, or fault signal recording, but these other functions must not interfere with the PMU function performance. Likewise, the PMU function must not interfere with the performance of other functions. If included integrated capabilities must be tested by the vendor and device performance under such circumstances must be documented in the user's manuals and device data sheets.

It is the user responsibility to specify all required features and confirm manufacturer specifications and test data.

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