

IEEE 1547 DER PQ MONITORING APPLICATIONS

Alternative Energy Monitoring Requirements and Solutions

APPLICATION



IEEE 1547 is a standard for the interconnection of Distributed Energy Resources (DER) to the grid. It defines how solar, wind, storage and other inverter based DER's are to connect to the grid. Included are how these devices interact with the grid, safety, reliability and **Power Quality**.

A recent amendment, *IEEE 1547.1 - 2020* defines conformance testing and requires that *IEC 61000-4-30 Class A* compliant PQ meters are used for voltage & current distortion, and other evaluations.

IEC 61000-4-30 is an internationally accepted standard for power quality monitoring methods. Presently in its 3rd Edition, IEC 61000-4-30 defines measurement accuracies, monitoring parameters and other requirements for PQ Meters. IEC 61000-4-30 defines several measurement classes with Class A compliant meaning full conformity to the requirements. There is also an accompanying testing standard to certify compliance. Using a certified IEC 61000-4-30 Class A Edition 3 meter means the meter is from a reputable manufacturer it has reliable and repeatable measurements.

The IEEE 1547 committee has assigned a PQ subgroup to better define the power quality and monitoring requirements for DER installations. The subgroup's recommendations will be included in a future revision to IEEE 1547.

DRANETZ SOLUTIONS

All [Dranetz HDPQ Plus](#) handheld PQ analyzers are fully compliant with IEC 61000-4-30 Class A Edition 3 (latest edition) and have a [test certificate](#) to prove it! If you require fixed monitoring, our [PQ3000](#) and [PQ5000](#) meters are also fully compliant with Edition 3 and include a test certificate.

Dranetz founded the PQ monitoring industry and was first to market with IEC 61000-4-30 complaint PQ devices. You can rely on Dranetz products for trustworthy, reliable and repeatable measurements.

Dranetz HDPQ Plus Portable Family

- Unmatched affordability & PQ monitoring
- AC & DC measurements - measure inverter in & out
- 3 models - one for every budget and application
- All are IEC 61000-4-30 Ed 3 Class A [certified](#) - trustworthy PQ measurements
- IEEE 519:2014 harmonic measurement & reporting
- Unique waveshape change triggers capture PF cap switching, transients, harmonics and other problems missed by other meters
- Free [Dran-View](#) software - simply the best PQ software in the industry!
- Full remote control. Ethernet, available Wi-Fi and external cellular
- 3-year factory warranty & Free technical support

Fixed Installed Meters

- IEC 61000-4-30 Class A Ed. 3 certified
- 4 quadrant energy and PQ
 - [PQ3000](#) panel mount meter
 - [PQ5000](#) DIN mount meter
- Available IEC 61850 communications
- Remote access via Ethernet and other communications
- 3-year factory warranty & Free technical support

TO CONTACT DRANETZ

- Call 1-800-372-6832 (US and Canada) or 1-732-287-3680 for Technical or Sales support.
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