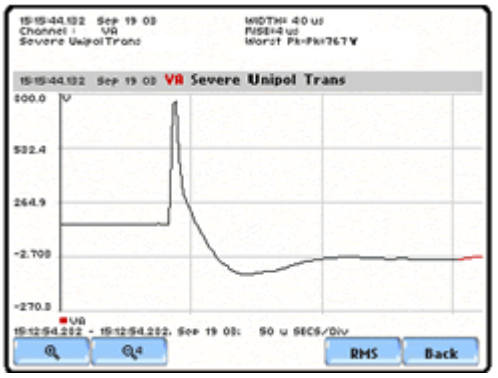
Applications for the PowerXplorer PX5

Typical Applications

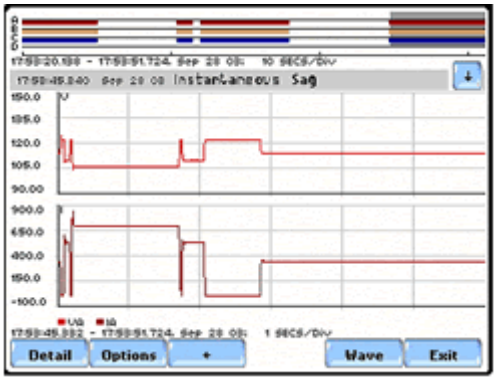
Fast Transient Capture

The PowerXplorer uses digitized high-speed sampling to capture and analyze microsecond-wide transients (Dranetz 658-like and BMI 8800-like). The PowerXplorer delivers a full profile, with events time stamped to the millisecond of the entire transient, to pinpoint the exact source and cause of the event.



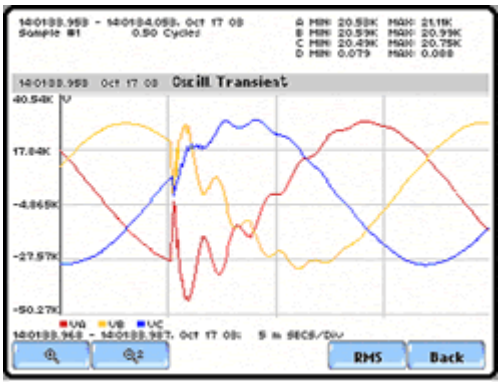
Power Quality Surveys and Diagnostics

The PowerXplorer has a built-in event characterizer that directly supports troubleshooting and the gathering of survey data—for improving power quality and equipment reliability.



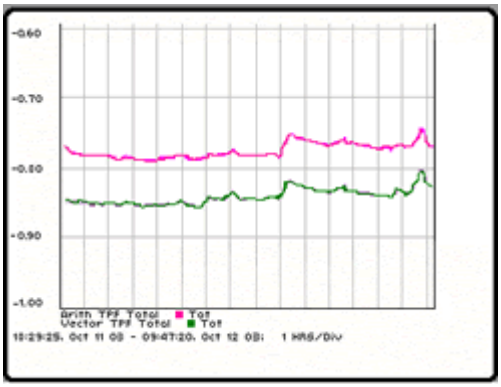
Capacitor Switching Events

A drawback of capacitors is that they yield oscillatory transients when switched. These transients can propagate through the local power system, causing damage to equipment and processes. The PowerXplorer captures and identifies these fast transients.



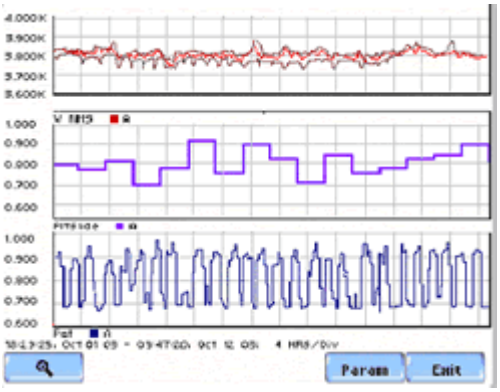
Load Distortion and Imbalance

The PowerXplorer measures the full range of arithmetic, vector and sequencing parameters contained in IEEE 1459, to evaluate distortion and restore balanced loads.



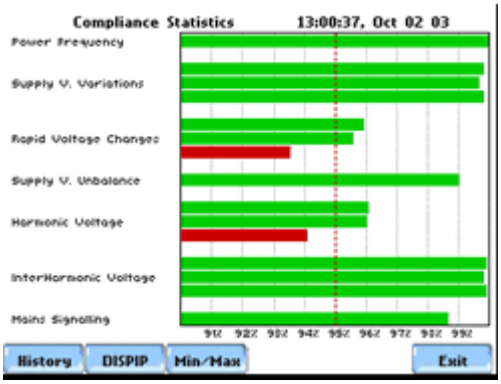
Flicker

The PowerXplorer captures flicker data per IEC 6100-4-15, which can be further evaluated using Dran-View visualization, analysis and reporting software.



Compliance Monitoring

The PowerXplorer has been designed to meet the most advanced power quality standards, including IEEE 1159, IEC 61000-4-30 Class A and EN50160. A statistical output is produced to quickly verify compliance with international quality-of-supply standards and benchmark power quality.



Harmonics

The PowerXplorer captures detailed harmonics, interharmonics and subharmonics to effectively troubleshoot the complex problems caused by these events.