DRANETZ HDPQ XPLORER 400

SPECIFICATIONS

MEASURED PARAMETERS

(4) Differential Voltage: 512 s/c @50/60Hz (1MHZ for High Speed Transient), 16 bit resolution. 64 S/C @400Hz

0-1000Vrms, AC/DC, ±0.1 % reading, <40V ±0.5%FS

IEC 61000-4-30 Class A: 60-1000Vrms, ±0.1 % of Udin, range of 10% ~ 150% of Udin. (50/60Hz only)

Transients - High Speed: 10-2000Vpk, +/- 10% of reading, +/- 0.5%FS

Transients: 0-1500Vpk, ±0.2 % of Udin

(4) Current (rms): 512 s/c (1MHZ for HS Trans.), 16 bit resolution. 64 S/C @400Hz

Range probe dep., AC/DC, +/- 0.1% reading +/- 0.05% FS

Transients - High Speed: Range probe dep., 10% of Reading +/- 0.5%FS

Transients: Range probe dep., ±0.2 % of Udin

Frequency:

42.5-69Hz, +/- 0.01Hz, 380-420Hz +/- 0.1Hz

CALCULATED PARAMETERS

Power/Energy - 1 Second sampling

Real Power (W) - P: meets 0.2S requirements, range probe dep.

Apparent Power (VA) - S: meets 0.2S requirements, range probe dep.

Reactive Power (var) - Q: meets 0.2S requirements, range probe dep.

Power Factor (W/VA) -"true" 1 to 0 to -1

Displacement PF 1 to 0 to -1

Demand (in W): meets 0.2S requirements, range probe dep.

Energy (in Wh): meets 0.2S requirements, range probe dep.

Distortion - 200ms, 3 sec, 10 min windows

Vthd: 0-100%, +/- 5% for V>=1% Vnom,

V Ind Harm: DC, 2-127 @50/60Hz, 2-15 @400Hz, +/- 5% for V>=1% Vnom

Ithd: 0-100%, +/- 5% for I>=1% Vnom,

I Ind Harm: DC, 2-63@50/60Hz, 2-15 @400Hz, +/- 5% for I>=1% Vnom

Misc.

Pst - 10 minutes: 0.2-10, +/- 0.05 @ Pst=1 (50/60Hz only)

Plt - 2 hours: 0.2-10, +/- 0.05 @ Pst=1 (50/60Hz only)

EASE OF USE FEATURES

Automatic Setups

Pre-programmed monitoring modes

AnswerModules®- Sag/Dip Directivity, PF Cap, Motor (50/60Hz only)

Dashboards - PQ, Demand & Energy

Simultaneous PQ, Demand & Energy

Mini Report, Screen Snapshots

STANDARDS COMPLIANCE (50/60Hz only)

Power Quality

IEC 61000-4-30 Class A: Edition 2 (2008)

IEEE 1159: 2009

Power

IEEE 1459: 2000

Harmonics

IEC 61000-4-7 Class 1: Edition 2 (2008)

IEEE 519: 2014

Voltage Flicker

IEC 61000-4-15: Edition 2 (2010)

IEEE 1453: 2011

Compliance/Testing

EN 50160: 2010

GENERAL SPECIFICATIONS

Size (10"w x 8"h x 2.75"d) (25.4cm x 20.3cm x 7.00 cm)

Weight: 1.9 kg, 4.3lbs

Operating temperature: 0 to 50 deg C

Storage temperature: -20 to 60 deg C

Humidity: 10-90% non condensing

Clock accuracy and resolution

Internal: +/- 1 sec/day at 25deg C

NTP: +/-10 msec

GPS: +/-1 msec

AC Adapter: 90-264Vac 50/60Hz

Battery capacity and charge time: 2.5 hours run time on full charge (3 hour charge time)

Memory size: 4GB

Display: 7" WVGA color graphic, icon based touch LCD, LED Backlit

Languages: English, German, Spanish, French, Italian, Swedish, Finnish, Polish, Chinese (traditional and simplified), Thai, Korean

COMMUNICATIONS

Ethernet, 802.11 b/g/n Wireless

USB On the Go

Bluetooth via USB adapter

VNC remote control

Android® & Apple® App

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J01-RevA

DRANETZ HDPQ® XPLORER 400

Take Dranetz PQ Monitoring to the Air or Sea with 400Hz Capability!

DRANETZ
www.dranetz.com

POWER QUALITY ANALYZER

Applications – 50Hz, 60Hz & 400Hz Capabilities!

The Dranetz HDPQ Xplorer 400 takes PQ, Demand and Energy monitoring to new heights by adding 400Hz monitoring capabilities to the already powerful Dranetz HDPQ Xplorer. Applications, such as aviation, naval, military and others require 400Hz capabilities that are not available in most PQ and Energy analyzers that can only measure 50/60Hz. The Dranetz HDPQ Xplorer 400 was designed with 400Hz applications in mind, but it is also an all-purpose tool that can be used for any traditional 50/60Hz application. In addition to the 400Hz applications, the Dranetz HDPQ Xplorer 400 is perfect for applications such as PQ surveys, voltage and current transient studies, fault recording, inrush, motor testing, harmonic analysis, advanced distortion analysis, demand/energy/load studies, and much more.

Advanced PQ & Energy Capabilities

Dranetz products have a long-standing tradition of having state of the art PQ monitoring capabilities and the HDPQ Xplorer 400 is no exception. The HDPQ Xplorer 400 meets and exceeds current versions of the most stringent industry monitoring standards, including:

Power Quality - *IEC 61000-4-30 Class A, IEEE 1159*

Harmonics - *IEC 61000-4-7, IEEE 519*

Voltage Flicker - *IEC 61000-4-15, IEEE 1453 – Including Pinst*

Advanced Energy – *IEEE 1459*

Capture High Speed Transients!

The HDPQ Xplorer 400 goes well beyond PQ standards by including transient capture capabilities for both voltage and current, such as: high speed transients to 1 microsecond, peak sample transients, and advanced waveshape change transients that can identify changes from cycle to cycle.

AnswerModules® – Smart & Good Looking!

Only available from Dranetz, AnswerModules are algorithms that automatically identify power quality problems and their source. These diagnostic and reporting tools are based on our decades of analytical experience, benchmarking and troubleshooting work. The HDPQ Xplorer 400 has three built-in AnswerModules:

Sag/Dip Directivity: *Automatically identifies the source of a Sag/Dip as being upstream or downstream from the monitoring source.*

Capacitor Switching: *Automatically identifies transients as being Power Factor correction transients.*

Motor Analysis: *Enables the PQ parameters that are important to motor surveys, and provides a custom dashboard for results.*

DRANETZ HDPQ XPLORER 400

Take Dranetz PQ Monitoring to the Air or Sea!

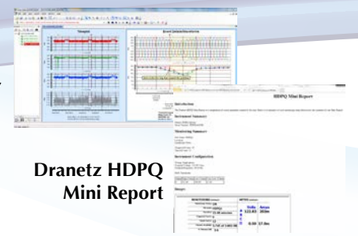
*The **Dranetz HDPQ Xplorer 400®** takes PQ, demand and energy monitoring to new heights by adding 400Hz monitoring capabilities to the already powerful Dranetz HDPQ Xplorer.*

V & I Connections
- 1000V CAT III (600V CAT IV)
- AC/DC Differential Voltage & Current Inputs
- DRANFLEX CT's powered by the instrument

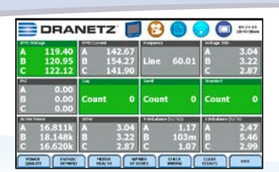
Innovative Package & Wide Screen
7" color, wide screen touch display. 40% larger than before - the largest in the industry!

Easel and Wire Management

Dran-View 7



Dranetz HDPQ Mini Report



Dashboard Display

Demand & Energy Trend

Easy to Use Intuitive User Interface

With our innovative packaging and 7" wide screen color touch display, the Dranetz HDPQ family of instruments are the most powerful and easy to use power monitoring instruments available. Like your tablet computer, simply use your finger or stylus to easily navigate the intuitive, icon-based user interface. Setting up the HDPQ Xplorer 400 is made easy with automatic setups that detect the circuit type, voltage, etc., and configure the instrument in seconds with typical industry settings. For customized setups, use the manual Wizard mode that guides you step-by-step through each setup. During monitoring, real time measurements can be viewed in many ways, including a color-coded reporting Dashboard, and meter/scope/phasor/harmonics displays. Recorded data can be viewed over time by using the timeline and event list displays, and also by using compliance reports, such as EN 50160.

Reporting & Analysis

The **Dranetz HDPQ** Mini Report tool allows you to easily take a snapshot of any screen for future use. By simply pressing the camera button, screen snapshots are saved, which compiles information in a report. Once completed, Mini Reports can be uploaded to a computer for editing, annotating, emailing, etc.

Dran-View 7® is our industry leading Windows-based software program that enables power professionals to simply and quickly visualize and analyze power monitoring data. Dran-View enhances the Dranetz HDPQ Xplorer 400 with its advanced analytical capabilities. It is successfully used by thousands of customers around the world, and has become the industry leading power management software tool. Dran-View is easy to use, yet adds tremendous value and power to our Dranetz HDPQ family of instruments. Of course Dran-View can trend and list data recorded by the instrument, but it also includes a built-in report writer, allows you to embed pictures, provides mathematical analysis tools, and even includes a rescue kit to help correct connection mistakes.

Demand and Energy Surveys

Managing energy and reducing related expenses is always of paramount importance, and in many cases is a corporate mandate. In addition to industry best power quality monitoring capabilities, all of the Dranetz HDPQ family of products also have extensive demand and energy monitoring capabilities for both long and short duration surveys. Unlike other lesser capable instruments, there's more than enough horsepower to perform complete PQ and energy surveys simultaneously – it's your choice to survey for PQ, Energy, or both. Seeing results is easy when using the energy and demand Dashboard reports that display real time and accumulated readings in a color-coded reporting format. There's also a billing report that includes your energy rates, including time of use. You can also upload your data to our Dran-View 7 software for viewing, reporting, and printing via PC.

Safe Remote Accessibility via Apps and VNC

DON'T RISK YOUR SAFETY! The Dranetz HDPQ Xplorer 400 comes with a standard Ethernet port, built-in Wireless, and USB Bluetooth communications that allow you to easily comply with today's arc flash and other safety standards. Simply install your HDPQ Xplorer 400, close the cabinet door, and use your Tablet, Smartphone, PC, or MAC computer to remotely control monitoring and review data. **Fully control your instrument remotely,** and see exactly what's on the local 7" display by using a free VNC program or App for PC, MAC, Apple, and Android devices. Or you can also use the **Dranetz HDPQ App** for Apple and Android devices to remotely view a real time Dashboard, scope mode, or remotely configure the instrument using automatic setups. For local access, there's also a built-in USB port to copy data to a USB drive or directly to your computer using a Plug-N-Play connection.