

Introducing the **Dranetz HDPQ®** Product Family

DRANETZ
HDPQ®



DRANETZ
HD PQ®
XPLORER 400



DRANETZ
HD PQ®
XPLORER



DRANETZ
HD PQ®
GUIDE



DRANETZ
HD PQ®
VISA

Dranetz HDPQ® Product Family - What Is It?

- New family of Power Quality, Demand & Energy instruments from Dranetz
- Replacement for each legacy PQ instrument
 - PowerVisa, PowerGuide, PowerXplorer, PowerXplorer-400 (available Fall 2014)
- Completely new enclosure, hardware and user interface
- We will continue to sell the PX5 family for the foreseeable future, but Dranetz HDPQ will become the focus
- Energy Platform EP1 remains as is without replacement

Product Tour

Measurement Inputs

- Voltage
 - 4 differential channels
 - CAT III 1000V, CAT IV 600V
 - Standard safety connectors
 - Black (+) and white (-) connectors and cables. Colored clips provided for cable identification
- Current
 - 4 differential channels
 - Flex probes powered from existing CT connector
 - Compatible with all PX5, 4300 CT's

*4 Voltage Channels – AC/DC
1000V CAT III/600V CAT IV*

*4 Current Channels – AC/DC
FLEX probe power*



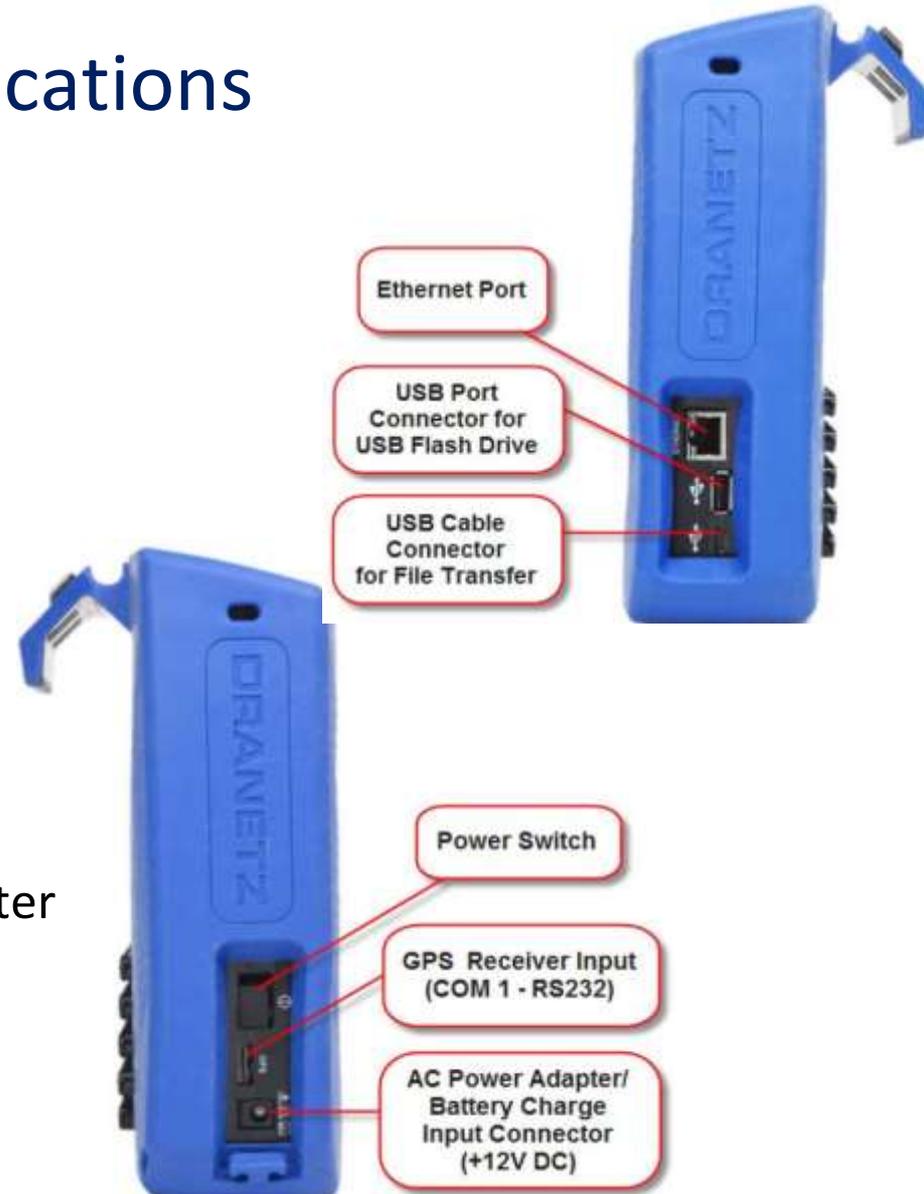
LCD & Front Panel

- LCD Display
 - 7" WVGA
 - LED Backlight
 - Touch Interface
 - Wide format
- ~40% larger than PX5
- 3 'Hard' buttons



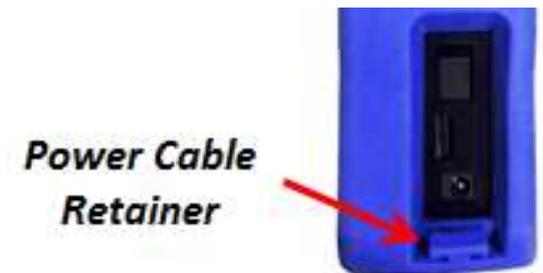
Communications

- 10/100 Ethernet - RJ45
- 802.11 wireless - Built in
 - Standard on Xplorer, Guide
 - Not available on Visa
- Bluetooth - External via USB
 - Standard on Xplorer, Guide
 - Optional on Visa
- USB On The Go – 2 ports
 - Full size (master) for memory stick, Bluetooth
 - Micro for Plug & Play with a computer
- External GPS receiver/antenna for time synchronization



Unique & Ergonomic Enclosure

- IP50, ABS plastic with rubber boot
- Built in hanger & stand
- Integrated cable management



Benefit from Enhanced Safety & Productivity through Communications, Software and Robust Design

Major user BENEFITS of the Dranetz HDPQ Family

- The major user BENEFITS of the Dranetz HDPQ family are:
 - **Precision**
 - **Communications**
 - **Productivity**
 - **User Interface**
 - **Safety Rugged – tough**
- The Dranetz HDPQ family product specs are great, but what is measured is no longer as important as how it's measured, and usability
- The Dranetz HDPQ family has many features that are new to Dranetz, and more importantly, new and unique to the industry

Precision

What You Expect From A Dranetz!

Precision

- High Definition Power Quality, Demand & Energy Monitoring
- 4 Differential Voltage Channels
 - 1000Vrms CAT III, 600V CAT IV, AC/DC
- 4 Differential Current Channels
 - Flex Probes Powered by the Instrument
- 512 samples/cycle, 1us Transients (Xplorer) – V & I
- Advanced Power Quality
 - IEC61000-4-30:2008 Class A, IEEE1159
- Harmonics
 - IEC6000-4-7, IEEE519
- Advanced Energy
 - IEEE1459
- EN50160:2010
- Intelligent AnswerModules®



Communications

A Picture Is Worth A Thousand Words...



Far From Work, But Close to Data!

Communications Features

Hardware capabilities

-  • Ethernet – Standard on all units
-  • 802.11 Wireless – Standard on the Xplorer/400, Guide, not available in Visa
-  • Bluetooth - Standard on the Xplorer/400, Guide, optionally available in Visa
-  • USB otg – Standard on all units
-  • GPS, NTP, Internal Time Synchronization – Available on all units

Software

-  • Apps for Apple, Android Tablets & Smartphones
- VNC Remote Control For PC, MAC, IOS & Android

Communications Benefits

- Fully Remote Control the Instrument! Uses an industry standard VNC connection. Customer downloads a free app for Apple, Android, PC, MAC.
- Android & Apple Apps
- Safety
- Productivity
- Data Transfer & Downloading
 - Download data & reports remotely using Ethernet Wi-Fi or Bluetooth (PC only)
 - Plug-N-Play Data Transfer to Computers
 - External USB Data & Report Transfer via Jump Drives



Communications Benefits – Safety

- Improved Arc Flash Safety!
- Install the instrument, close the cabinet doors and don't touch the instrument again until it's removed!
- Safely setup and control the instrument from anywhere with connectivity to the instrument
- Reduces the exposure to hazardous environments
- UL Listed & CE Approved instruments
- Easy to grip boot, safe (non-conductive), shock absorbing
- Power supply cable retainer
- Wire management in easel and hook
- Automatic circuit detection and feedback on proper connection of the instrument



Productivity

Save Time & Get more out of your investment!

Productivity Features

Capabilities

- Mini-Reports
 - Mini-Reports are a compilation of screen snapshots taken from the instrument
 - Users start a Mini-Report and press the Snapshot button to capture a .bmp file of the screen
 - .bmp files are compiled into a .xml Mini Report that can be easily uploaded remotely or via USB
 - Users can annotate Mini-Reports or email to colleagues, etc.
- Communications
- Dran-View 7
- High Definition PQ Measurement Capabilities



Productivity Benefits

- Enhanced end user support within their organization
 - Easily take screen snapshots and share within their organization without using software such as DV
 - Mini-Reports or just the .bmp files
- Enhanced Dranetz tech support
 - Tech support can remotely access units for support
 - Users can also send tech support snapshots and Mini-Reports
- Bigger display for more productive local analysis

The screenshot displays the HDPQ Mini Report software interface. At the top, the Windows taskbar shows the file path: C:\Ross Stuff\Next Gen\Mini Report\HDPQ_Reports\HDPQReport_te. The main content area is divided into several sections:

- Introduction:** A brief overview of the report's purpose.
- Instrument Summary:** Details the instrument used, including Model (HDPQ Explorer) and Serial Number (HDP5AA008).
- Monitoring Summary:** Lists the Site Name (HDPQ1), Location, Installation Notes, Trapped Events (1), and Total Events (1111).
- Instrument Configuration:** Shows settings such as Wiring (Three phase wye), Nominal Voltage (110.00 Vrms), and Nominal Frequency (60.00 Hz). It also includes a table for K1A3 Thresholds.
- Images:** A graph showing Wave (Volts) over time, with a red line indicating a significant spike.
- Table:** A table with columns for Report Date, Time, Status, Type, and @Location. It lists three entries related to HDPQ Explorer.

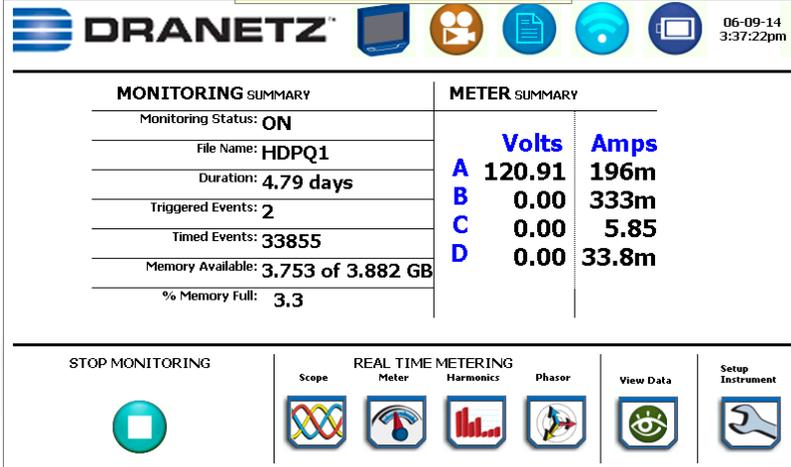
At the bottom, a timestamp indicates the report was captured on 06/08/2014 at 10:07:18.

User Interface

User Interface Features

Capabilities

- 7" WVGA, wide screen touch display
- Tablet like interface - Icon driven, taskbar shortcuts
- Home screen with monitoring summary & metering
- Power Quality, Demand & Energy Dashboards
- Taskbar with battery gage, time and instrument status
- Real time reporting
 - Mini-reports & Snapshots
 - Meters & Strip chart recorder
- Predefined monitoring modes
 - 7 for the Dranetz HDPQ Visa
 - 9 for the Dranetz HDPQ Guide, Xplorer



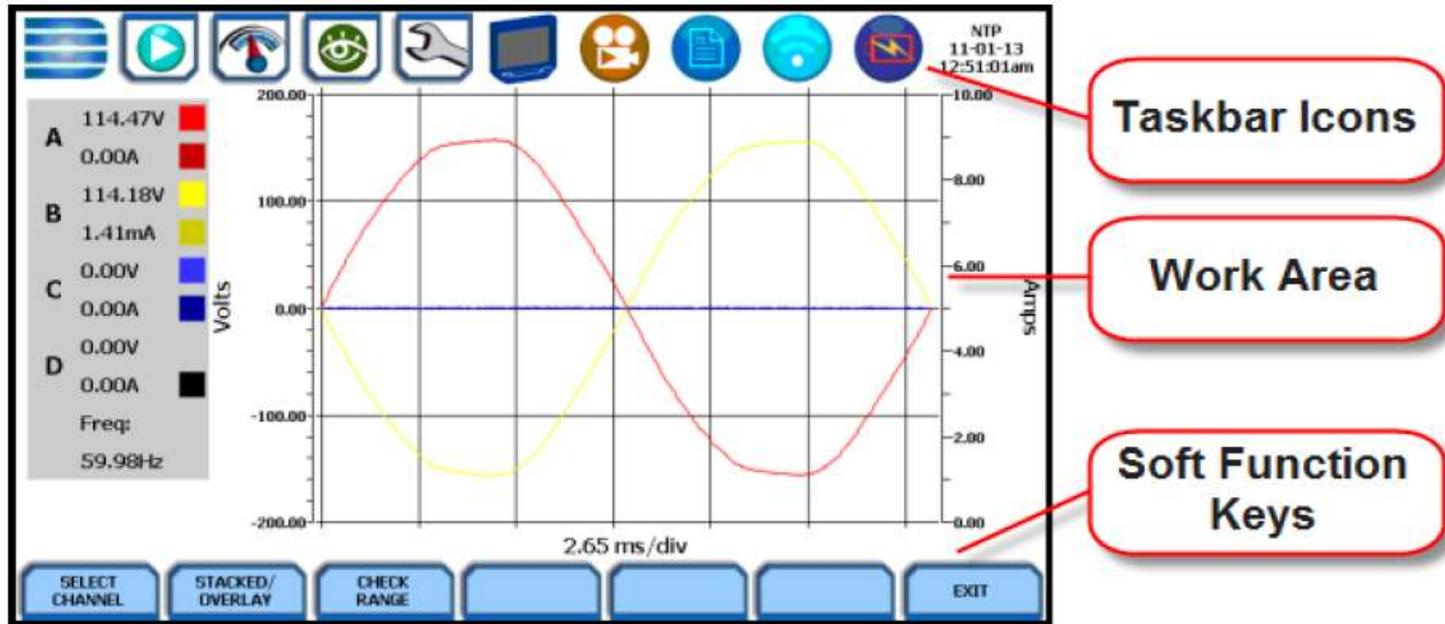
The screenshot displays the DRANETZ HDPQ user interface. At the top, the DRANETZ logo is on the left, and the date and time (06-09-14 3:37:22pm) are on the right. Below the header, there are two main sections: MONITORING SUMMARY and METER SUMMARY.

MONITORING SUMMARY		METER SUMMARY	
Monitoring Status:	ON		
File Name:	HDPQ1		
Duration:	4.79 days		
Triggered Events:	2		
Timed Events:	33855		
Memory Available:	3.753 of 3.882 GB		
% Memory Full:	3.3		

	Volts	Amps
A	120.91	196m
B	0.00	333m
C	0.00	5.85
D	0.00	33.8m

At the bottom, there is a taskbar with several icons: STOP MONITORING (a square with a circle), REAL TIME METERING (Scope, Meter, Harmonics, Phasor), View Data (an eye icon), and Setup Instrument (a wrench icon).

User Interface – Tablet Like



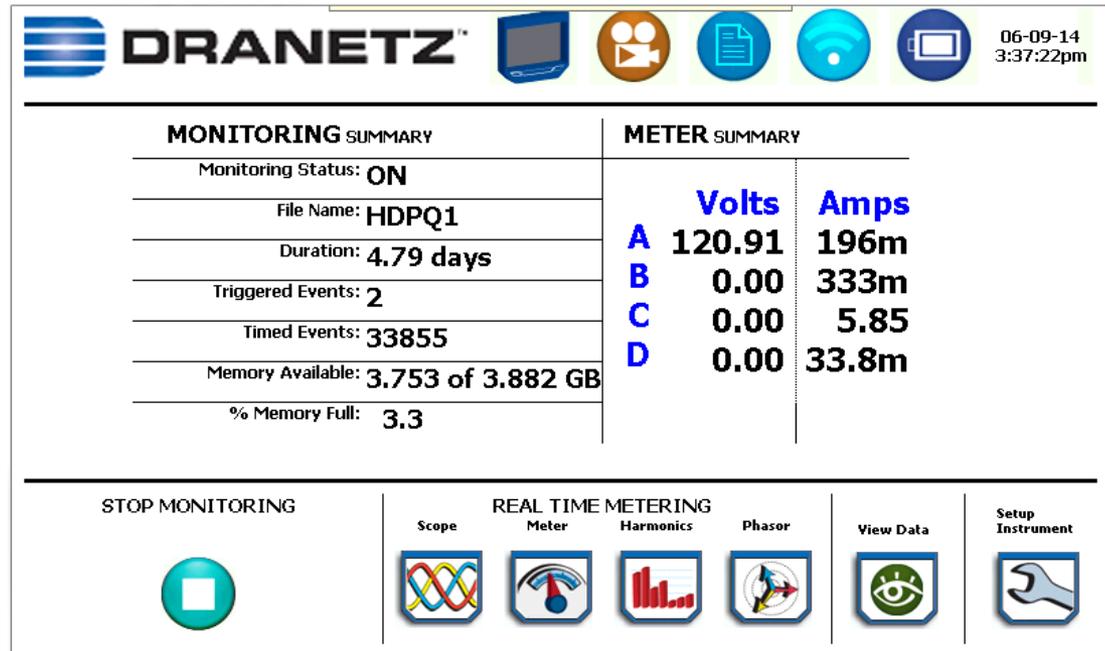
User Interface - Dashboards

- Real time alarm panel
- Power Quality Dashboard
- Energy/Demand Dashboard
- Motor Health Dashboard
- User configurable parameters & alarms



User Interface – Monitoring Home Screen

- Monitoring summary with % memory usage
- % Memory Full indicator
- Real time metering
- Icons for quick access to major instrument functions



The screenshot shows the DRANETZ monitoring home screen. At the top, there is a navigation bar with the DRANETZ logo, a laptop icon, a video camera icon, a document icon, a Wi-Fi icon, and a tablet icon. The date and time are displayed as 06-09-14 3:37:22pm.

MONITORING SUMMARY		METER SUMMARY	
Monitoring Status:	ON		
File Name:	HDPQ1	Volts	Amps
Duration:	4.79 days	A	120.91 196m
Triggered Events:	2	B	0.00 333m
Timed Events:	33855	C	0.00 5.85
Memory Available:	3.753 of 3.882 GB	D	0.00 33.8m
% Memory Full:	3.3		

At the bottom, there is a row of icons for quick access to major instrument functions:

- STOP MONITORING (Green square icon)
- REAL TIME METERING (Group of icons):
 - Scope (Waves icon)
 - Meter (Gauge icon)
 - Harmonics (Bar chart icon)
 - Phasor (Phasor diagram icon)
 - View Data (Eye icon)
 - Setup Instrument (Wrench icon)

Safety

Safety Features

Capabilities

- Arc Flash Safety
- 1000V CAT III, 600V CAT IV
- UL listed and CE approved
- Communications greatly enhance operator safety
- Power supply cable retainer
- Wire management in easel and hook
- Automatic circuit detection and feedback on proper connection of the instrument

Do This



Not



This

Product Offering & Differentiation

Dranetz HDPQ Family and Tag Lines

**Take Dranetz PQ Monitoring To
The Air or Sea!**



DRANETZ
HDPQ®
XPLORER400

**Simply the Best PQ Analyzer –
Don't Miss an Event!**



DRANETZ
HDPQ®
XPLORER

**The Best Combination of Value &
Technology in a PQ Analyzer – Safe,
Powerful & Intelligent!**



DRANETZ
HDPQ®
GUIDE

**The Best Value in a PQ & Energy
Monitoring Analyzer**



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DRANETZ
HDPQ[®]

VISA



The Best Value in a PQ & Energy Monitoring Analyzer

Dranetz HDPQ Visa

- Ethernet, USB otg
- VNC Remote Control for PC, MAC, IOS & Android
- Apps for Apple, Android Tablets & Smartphones
- Intelligent Answer Modules® - Motor
- 7-inch Wide screen color, touch LCD
- 1000V CAT III, 600V CAT IV
- 4 differential 50/60Hz, AC/DC voltage channels
- 4 AC/DC Current channels with FLEX probe power
- 32us/40us low, med frequency V & I transients
- IEC 61000-4-30: 2008 Class A, EN50160, IEEE 1159, 519, 1453
- Sag/Dip, Swell, Transients, Unbalance, Flicker
- Harmonics, Interharmonics, Mains Signaling
- Easy-to-use with automatic or manual setups
- 4GB internal FLASH memory, external USB storage
- GPS, NTP, Internal Time Synchronization
- Fully Compatible with Dran-View 7
- Enhanced productivity - Mini Reports & screen snapshots
- Rugged IP50 Enclosure with easel & cable management
- Universal power supply with multi-country plugs



DRANETZ
HDPQ®
VISA

Items in Red are new features or enhancements vs. the PowerVisa

Dranetz HDPQ Visa

- Only sold in packages
- Available Packages
 - HDPQ-VA10PKG – 10A Clamp
 - Qty (4) TR-2510B (1A-10A CT) clamp CT's
 - HDPQ-VA500PKG – 500A Clamp
 - Qty (4) TR-2500B (1A-10A CT) clamp CT's
 - HDPQ-VA550PKG – 100A Clamp
 - Qty (4) TR-2550B (1A-10A CT) clamp CT's
 - HDPQ-VAFLEX3KPKG – 3000A FLEX
 - Qty (1) DRANFLEX3003XLB24 3 phase CT, Qty (1) DRANFLEX3000XLB24 1 Phase CT
 - HDPQ-VAFLEX6KPKG – 6000A FLEX
 - Qty (1) DRANFLEX6003XLB24 3 phase CT, Qty (1) DRANFLEX6000XLB24 1 Phase CT
 - HDPQ-VAMFLEX3PKG – 300A Micro FLEX
 - Qty (4) DRANFLEX300MHB6
- All packages also come with Dran-View 7 **Pro**, soft carry case and the CT's mentioned above





DRANETZ
HDPQ® *GUIDE*



**The Best Combination of Value & Technology
in a PQ Analyzer – Safe, Powerful & Intelligent!**

Dranetz HDPQ Guide

- All Dranetz HDPQ Visa features, plus...
- **802.11 Wireless, Bluetooth**
- **IEEE 1459 Advanced Energy**
- Sag Directivity, PF Cap Intelligent Answer Modules®
- Inrush & Fault recording with 10K cycle storage



DRANETZ
HDPQ®
GUIDE

Items in Red are new features or enhancements vs. the PowerGuide

Dranetz HDPQ Guide

- Instrument available separately

- HDPQ-GUIDE-A

- Available Packages

- HDPQ-GAPKG – Distri starter - No CT's
- HDPQ-GA10PKG – 10A Clamp
 - Qty (4) TR-2510B (1A-10A CT) clamp CT's
- HDPQ-GA500PKG – 500A Clamp
 - Qty (4) TR-2500B (1A-10A CT) clamp CT's
- HDPQ-GA550PKG – 100A Clamp
 - Qty (4) TR-2550B (1A-10A CT) clamp CT's
- HDPQ-GAFLEX3KPKG – 3000A FLEX
 - Qty (1) DRANFLEX3003XLB24 3 phase CT, Qty (1) DRANFLEX3000XLB24 1 Phase CT
- HDPQ-GAFLEX6KPKG – 6000A FLEX
 - Qty (1) DRANFLEX6003XLB24 3 phase CT, Qty (1) DRANFLEX6000XLB24 1 Phase CT
- HDPQ-GAMFLEX3PKG – 300A Micro FLEX
 - Qty (4) DRANFLEX300MHB6

- All packages also come with Dran-View 7 **Enterprise**, soft carry case and the CT's mentioned above





DRANETZ
HDPQ® XPLORER



Simply the Best PQ Analyzer – Don't Miss an Event!

Dranetz HDPQ Xplorer

- All Dranetz HDPQ Guide features, plus...
- High Speed Transients to 1us for V & I



DRANETZ
HDPQ®
XPLORER

Dranetz HDPQ Xplorer

- Instrument available separately
 - HDPQ-XPLORER-A
- Available Packages
 - HDPQ-XAPKG – Distri starter - No CT's
 - HDPQ-XA10PKG – 10A Clamp
 - Qty (4) TR-2510B (1A-10A CT) clamp CT's
 - HDPQ-XA500PKG – 500A Clamp
 - Qty (4) TR-2500B (1A-10A CT) clamp CT's
 - HDPQ-XA550PKG – 100A Clamp
 - Qty (4) TR-2550B (1A-10A CT) clamp CT's
 - HDPQ-XAFLEX3KPKG – 3000A FLEX
 - Qty (1) DRANFLEX3003XLB24 3 phase CT, Qty (1) DRANFLEX3000XLB24 1 Phase CT
 - HDPQ-XAFLEX6KPKG – 6000A FLEX
 - Qty (1) DRANFLEX6003XLB24 3 phase CT, Qty (1) DRANFLEX6000XLB24 1 Phase CT
 - HDPQ-XAMFLEX3PKG – 300A Micro FLEX
 - Qty (4) DRANFLEX300MHB6
- All packages also come with Dran-View 7 **Enterprise**, soft carry case and the CT's mentioned above



Dranetz HDPQ Xplorer-400

- All Dranetz HDPQ Xplorer features, plus...
- 400Hz measurement capabilities for Naval, Shipboard and Aviation applications
- *Available Fall 2014*



DRANETZ
HDPQ®
XPLORER400

Dranetz HDPQ Family Standard Accessories

- AC power adapter with universal plugs
- Voltage cable set
 - (4) Black 6ft cables
 - (4) Black alligator clips
 - (4) White 6ft cables
 - (4) White alligator clips
 - (4) 10" jumper cables
 - Voltage cable wire marker kit
 - Current cable wire marker kit
 - Pouch
- Keyhole mounting kit with shoulder plate
- USB cable for data transfer



PS-HDPQ



VCS-HDPQ



USB-MCABLE



118313-G1
Keyhole Mounting Kit

Dranetz HDPQ Specific Accessories

- BP-HDPQ: Spare battery
- XBC-HDPQ-US: External batter charger
- ENCL-HDPQ-US: Weather resistant enclosure
- GPSMAKIT-HDPQ: GPS receiver and antenna kit
- USB-BLUETOOTH: USB Bluetooth adapter
- USB-FLASH: Micro USB Flash drive
- SCC-HDPQ: Soft carry case
- RSC-HDPQ: Rugged shipping container
- VCS-HDPQ: Voltage cable set
- Wire marker kits (for voltage, current and FVA cables)
- Ethernet cables (straight and crossover)
- USB cables



GPSMAKIT-HDPQ



BP-HDPQ



RSC-HDPQ



XBC-HDPQ-US



USB-BLUETOOTH



USB-FLASH



ENCL-HDPQ-US

HDPQ Applications Guide

	<i>Dranetz HDPQ Visa</i>	<i>Dranetz HDPQ Guide</i>	<i>Dranetz HDPQ Xplorer</i>
Power Quality Testing (IEC61000-4-30 Class A, IEEE1159)	X	X	X
Energy/Load Surveys & Studies	X	X	X
Advanced Load Distortion and Imbalance		X	X
400 HZ Measurements			Xplorer-400
Fault Recording / In-Rush		X	X
Motor Testing	X	X	X
Data Logging	X	X	X
Harmonics to 127rd (IEC61000-4-7, IEEE519)	X	X	X
Flicker per IEC61000-4-15, IEEE1453	X	X	X
High Speed Transient Capture			X
AnswerModules (motor health, cap switch, sag)	<i>(motor health)</i>	X	X
Pre-programmed Monitoring Modes	7	9	9
Pre/Fault/Post Cycles	100	10,000	10,000
Multiple Languages	X	X	X
Remote Control	X	X	X

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