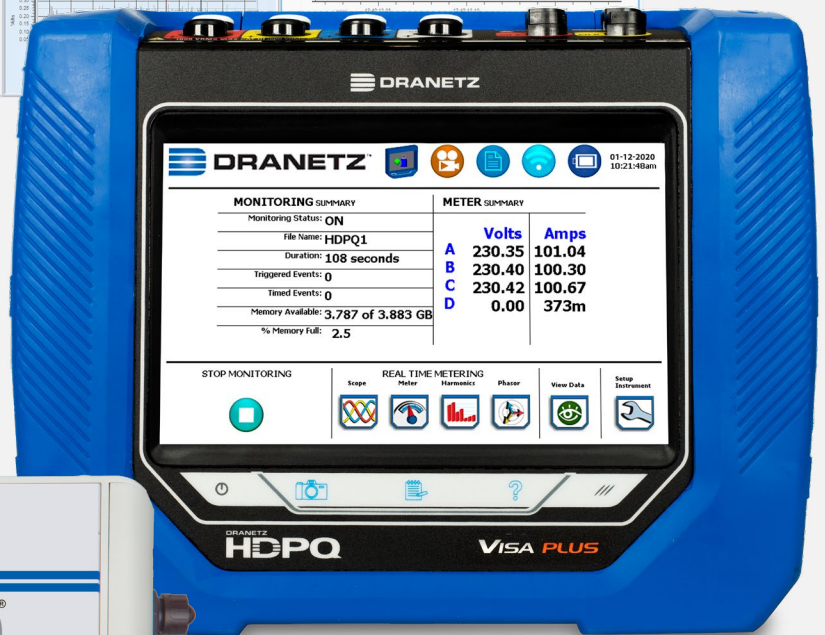
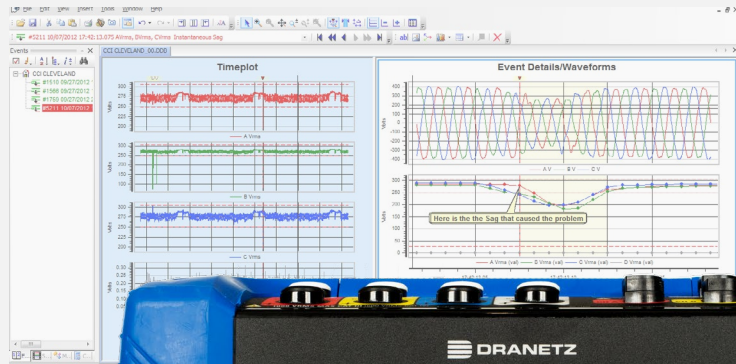


POWER QUALITY MONITORING

TRUSTWORTHY POWER MONITORING



DRANETZ HDPQ® PLUS SERIES



DRANETZ HDPQ® SP SERIES

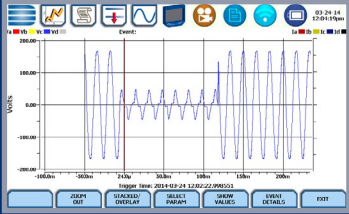
HDPQ PLUS SERIES

VISA PLUS • GUIDE PLUS • XPLORER PLUS • XPLORER 400 PLUS

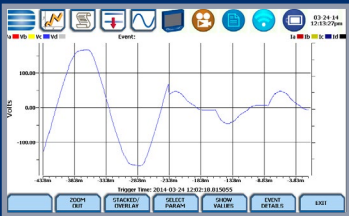
HDPQ SP SERIES

VISA SP • GUIDE SP • XPLORER SP • XPLORER 400 SP

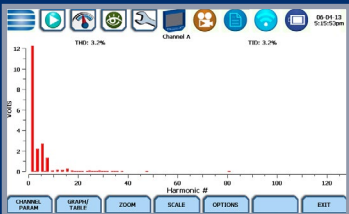
50 YEARS OF TRUSTWORTHY MEASUREMENT



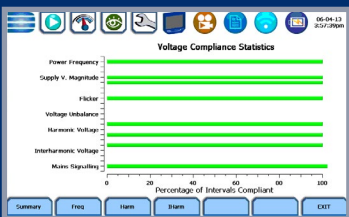
PQ Surveys
IEC 61000-4-30 Class A Ed 3



Transient Recording
Peak, Waveshape Changes



Harmonics Recording
IEEE 519-2014, IEC 61000-4-7



Compliance Reporting
IEEE 519-2014, EN 50160

DRANETZ HDPQ® FAMILY

- 4 MODELS TO MEET EVERY BUDGET AND APPLICATION
- EACH MODEL IS AVAILABLE IN 2 ENCLOSURES

DRANETZ HDPQ® PLUS SERIES PORTABLE, 7" DISPLAY



XPLORER 400 PLUS

XPLORER PLUS

VISA PLUS

GUIDE PLUS

DRANETZ HDPQ® SP SERIES SP-IP65, PHASE POWERED



XPLORER 400 SP

XPLORER SP

VISA SP

GUIDE SP

APPLICATIONS (model dependant)

- PQ Surveys
- Energy/Load Surveys & Studies
- Data Logging
- Substation Monitoring
- DER/Alternative Energy
- Capacitor Testing
- Motor Testing
- Advanced Load Distortion and Imbalance
- Fault Recording/In-Rush
- UPS, Generator Testing/Commissioning
- Transformer/Inrush Testing
- TVSS, Protection Device Testing
- Aircraft/Aviation, Naval

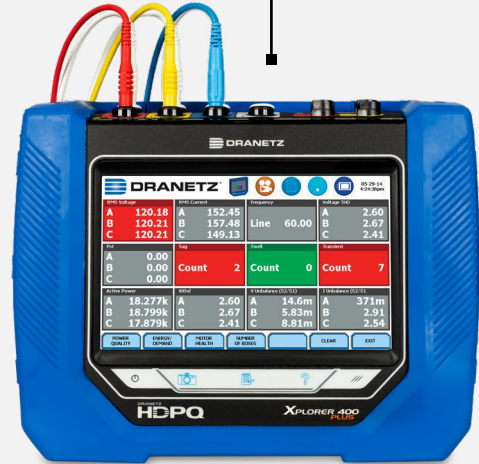


V & I CONNECTIONS

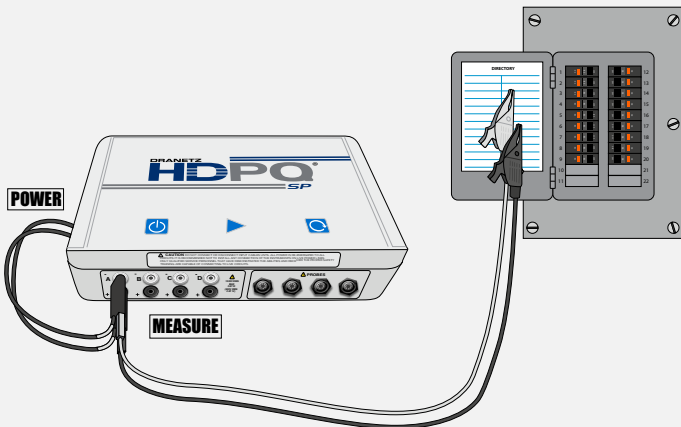
- 1000V CAT III (600V CAT IV)
- AC/DC Differential Voltage & Current Inputs
- DRANFLEX CT's powered by the instrument
- IEC 61000-4-30 Class A Ed. 3 Compliant



DRANETZ HDPQ VISA SP
IP65 Enclosure - No Display, Phase Powered



DRANETZ HDPQ® PLUS SERIES
Portable with 7" Display + Colored Cables



PHASE POWER ON SP MODELS ONLY



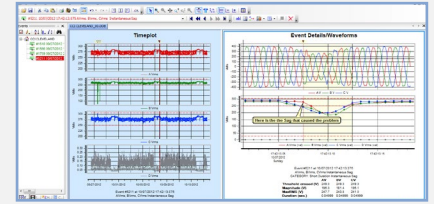
SAFE REMOTE ACCESSIBILITY VIA DRAN-VIEW® 7, APPS AND VNC

- Set it and forget it! Hands off for safety.
- Full remote access using ethernet. Wi-Fi (model dependent) and Bluetooth
- Remote control, data analysis & reporting using Dran-View® 7
- Remote control using Android and Apple VNC Apps.



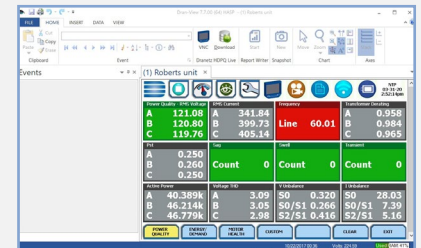
DRAN-VIEW 7 REMOTE CONTROL, ANALYSIS & REPORTING

- Windows based power quality, demand & energy analysis
- Powerful, yet easy to use
- 64 bit software for speed
- Fully compatible with the Dranetz HDPQ series and most legacy products
- Two versions are available
 - **PRO** for the everyday user (included with most HDPQ Visa packages)
 - **ENTERPRISE** for the advanced user (included with most other HDPQ packages)
- Automatic (or manual) internet updates



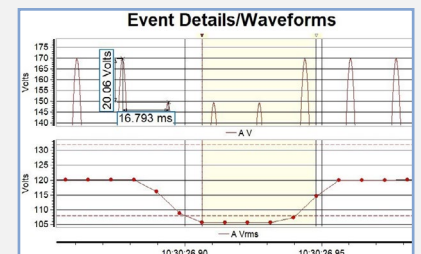
REAL TIME REMOTE CONTROL OF ALL HDPQ SERIES INSTRUMENTS

- Remotely control the user interface – as if you were in front of the meter (SP included)
- Remote real time metering
- Remote control of all settings
- Remotely download recorded data



POWERFUL ANALYTICAL TOOLS

- View all recorded instrument data
- Trends, events, waveforms
- Zooming, panning, scrolling and other tools
- Event filtering & sorting
- Rescue kit – correct timestamps, scaling, connections



REPORTING

- Automatic or manual report generation
- Customizable report contents with YOUR logo
- Compliance reporting – IEEE 519-2014, EN 50160 and more
- Integrated RTF editor

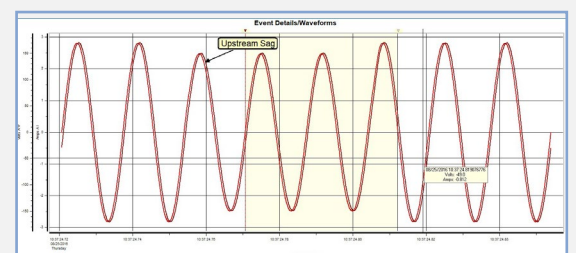
Event Details/Waveforms

Date:	Interval:	Statistic:	Compliance:
3/14/2020	Daily	Very Short (99th)	Fail
Nominal voltage:	Nominal current:	Max Demand Current:	Max ShortCir Current:
230.00	10.33	10.00	100.00

Harm.	AV	AI	BV	BI	CV	CI	DV	DI
THD	39.403	0.023	39.399	0.033	39.404	0.030		
2	0.008	0.007	0.010	0.008	0.011	0.007		
3	18.289	0.007	18.289	0.008	18.284	0.008		
4	0.008	0.008	0.008	0.005	0.008	0.005		
5	18.289	0.008	18.288	0.005	18.289	0.008		
6	0.005	0.005	0.007	0.005	0.008	0.005		
7	18.288	0.008	18.288	0.005	18.288	0.008		
8	0.005	0.005	0.007	0.005	0.008	0.005		
9	18.289	0.005	18.289	0.008	18.288	0.008		
10	0.005	0.005	0.010	0.005	0.010	0.008		
11	0.007	0.008	0.008	0.008	0.008	0.008		
12	0.007	0.008	0.009	0.008	0.009	0.008		
13	0.007	0.008	0.009	0.008	0.010	0.008		
14	0.007	0.005	0.008	0.008	0.008	0.008		
15	0.007	0.005	0.007	0.008	0.010	0.008		

DRAN-VIEW® 7 ENTERPRISE ALSO INCLUDES

- Snapshot/Bookmark tool
- Drag & drop charts – customizable appearance
- Insert pictures & photos into charts
- Annotations – add comments to points in charts
- Multisite capabilities – overlay data from different sites
- Math tool – create formulas for custom parameters
- Harmonic generation tool – compute harmonics from any recorded waveforms





DRANETZ HDPQ FAMILY MODEL SELECTOR

	Visa Plus Visa SP	Guide Plus Guide SP	Xplorer Plus Xplorer SP	Xplorer 400 Plus Xplorer 400 SP
ENCLOSURE				
Portable with 7" Touch Screen	HDPQ Plus Portable	HDPQ Plus Portable	HDPQ Plus Portable	HDPQ Plus Portable
SP IP65 without display	HDPQ SP	HDPQ SP	HDPQ SP	HDPQ SP
POWER SUPPLY				
AC Mains Power - 90-264, 50/60Hz	HDPQ Plus Portable	HDPQ Plus Portable	HDPQ Plus Portable	HDPQ Plus Portable
Phase Powered - 600VAC, 500VDC	HDPQ SP	HDPQ SP	HDPQ SP	HDPQ SP
MEASUREMENTS & MONITORING				
Power Quality - Sag, Swell, Interruption	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IEC61000-4-30 Class A Ed. 3 Compliant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
W, VA, VAR, PF, Demand Energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Peak & Waveshape Transient Capture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Harmonics - IEC61000-4-7, IEEE519-2014	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Flicker - IEC61000-4-15, IEEE1453	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pre/Fault/Post Cycles	100	10,000	10,000	10,000
Pre-Programmed Monitoring Modes	7	9	9	9
AnswerModules - Motor Health, Sag, PF Cap		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High Speed Transient Capture			<input type="radio"/>	<input type="radio"/>
400 HZ Measurements				<input type="radio"/>
COMMUNICATIONS				
Ethernet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wi-Fi		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
USB	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dran-View 7 Full Remote Control & Data Downloading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Apple & Android VNC Apps - Full Remote Control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
GPS Time Synch (optional)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
APPLICATIONS				
PQ Surveys	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Energy/Load Surveys & Studies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data Logging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Substation Monitoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
DER/Alternative Energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capacitor Testing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motor Testing		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advanced Load Distortion and Imbalance		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fault Recording / In-Rush		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
UPS, Generator Testing/Commissioning		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transformer/Inrush testing		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TVSS, Protection Device Testing			<input type="radio"/>	<input type="radio"/>
Aircraft/Aviation, Naval				<input type="radio"/>

TECHNICAL DATA

MEASURED PARAMETERS

- (4) Differential Voltage: 512 s/c, 16 bit resolution
0-1000Vrms, AC/DC, $\pm 0.1\%$ reading, $<40V \pm 0.5\%$ FS
IEC 61000-4-30 Class A: 60-1000Vrms, $\pm 0.1\%$ of U_{din} , range of 10%-150% of U_{din}
Transients: 0-1414Vpk, $\pm 0.2\%$ of U_{din}
Transients - High Speed: 1MHz (Xplorer/400), 10-2000 Vpk, $\pm 10\%$ of reading, $\pm 0.5\%$ FS
- (4) Current: 512 s/c, 16 bit resolution
Range probe dep., AC/DC, $\pm 0.1\%$ reading $\pm 0.05\%$ FS

FREQUENCY:

16-25Hz, 42.5-69Hz, ± 0.01 Hz

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

V_{thd}: 0-100%, $\pm 5\%$ for $V \geq 10\%$ V_{nom},
V_{Ind Harm}: DC, 2-127, $\pm 5\%$ for $V \geq 10\%$ V_{nom}
I_{thd}: 0-100%, $\pm 5\%$ for $I \geq 10\%$ I_{nom},
I_{Ind Harm}: DC, 2-63, $\pm 5\%$ for $I \geq 10\%$ I_{nom}

MISC.

Pst - 10 minutes: 0.2-10, ± 0.05 @ Pst=1
Plt - 2 hours: 0.2-10, ± 0.05 @ Pst=1

EASE OF USE FEATURES

Automatic Setups
Pre-programmed monitoring modes
Dashboards - PQ, Demand & Energy
Simultaneous PQ, Demand & Energy Monitoring
Mini Report

STANDARDS COMPLIANCE

POWER QUALITY

IEC 61000-4-30 Class A Edition 3 Compliant
IEEE 1159: 2009

POWER

IEEE 1459: 2000

STANDARDS COMPLIANCE (CONTINUED)

COMMON ACCESSORIES



FLEX CT'S



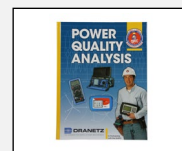
CLAMP CT'S



ENCLOSURES



MAGNETIC MOUNT



BOOKS



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

DRANETZ HDPQ PLUS SERIES

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

Weight: 4.2lbs, 2kg

Operating temperature: 0 to 50 deg C (32 to 122 deg F)

Storage temperature: -20 to 55 deg C (-4 to 131 deg F)

Humidity: 10-90% non condensing

Run time on full charge: 3 hrs Visa/Guide, 2.5hrs Xplorer/400, 3 hours charge time

AC Power: 90-264(max) 50/60Hz

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

DRANETZ HDPQ SP SERIES- IP65 ENCLOSURE

Size: (11" w x 6.5" h x 2.5" d), (27.9cm x 16.5cm x 6.4cm)

Weight: 3.2lbs, 1.45kg

Operating temperature: -10 to 50 deg C (14 to 122 deg F)

Storage temperature: -40 to 85 deg C (-40 to 185 deg F)

Humidity: 10-90% non condensing

30 minutes run time on full charge, 3 hours charge time

AC/DC Power: 90-600V AC / 500 DC Max CAT IV, 50/60Hz 30W Max

Clock accuracy and resolution

Internal: ± 1 sec/day at 25deg C

NTP: ± 10 msec

GPS: ± 1 msec

Memory size: 4GB

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

COMMUNICATIONS

Ethernet, 802.11 b/g/n Wi-Fi (not available in Visa Plus/SP)

USB

Bluetooth via USB adapter (optional)

VNC remote control

Android® & Apple® VNC App