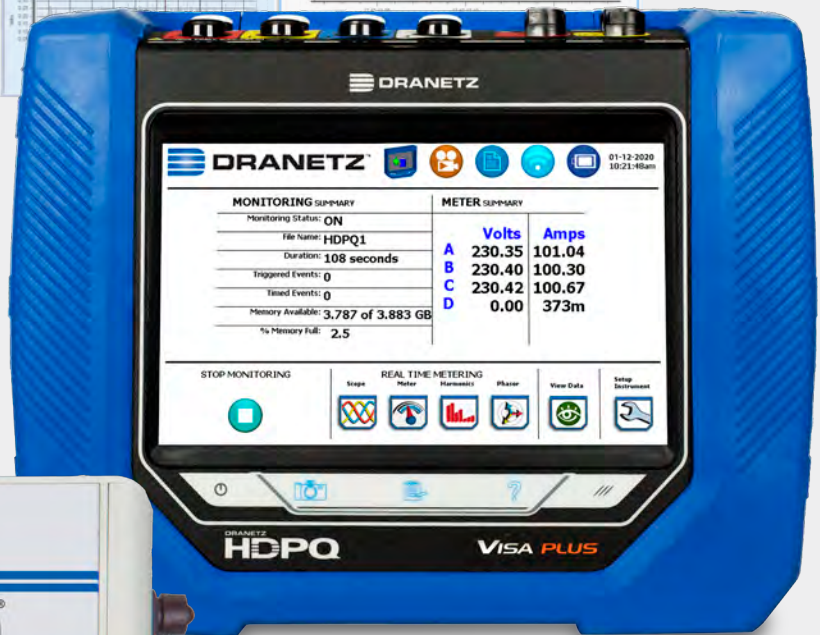
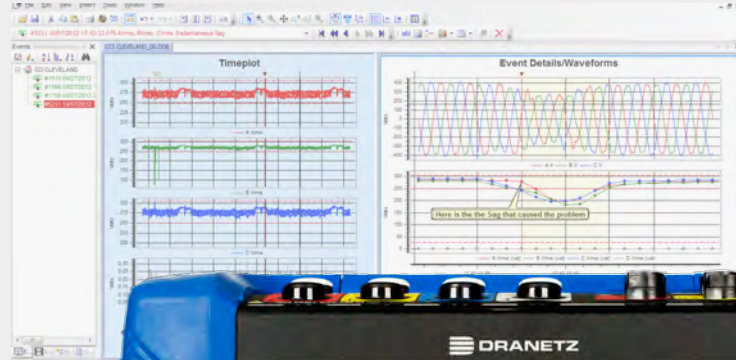


POWER QUALITY MONITORING

TRUSTWORTHY
POWER MONITORING



DRANETZ HDPQ® PLUS SERIES



DRANETZ HDPQ® SP SERIES

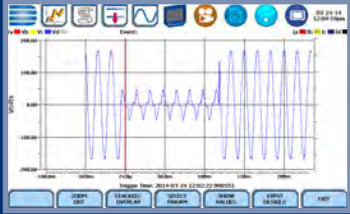
HDPQ PLUS SERIES

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

HDPQ SP SERIES

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

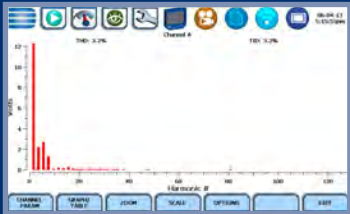
50 YEARS OF TRUSTWORTHY MEASUREMENT



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)

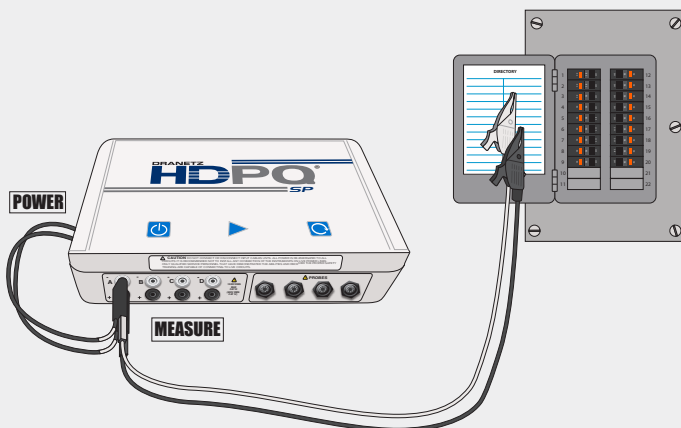
- PQ Surveys
- Energy/Load Surveys & Studies
- Data Logging
- Substation Monitoring
- DER/Alternative Energy
- Capacitor Testing
- Motor Testing
- Advanced Load Distortion and Imbalance
- Fault Recording/In-Rush
- UPS, Generator Testing/Commissioning
- Transformer/Inrush Testing
- TVSS, Protection Device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

**PHASE POWER ON SP MODELS ONLY****DRANETZ HDPQ® PLUS SERIES**

Portable with 7" Display + Colored Cables

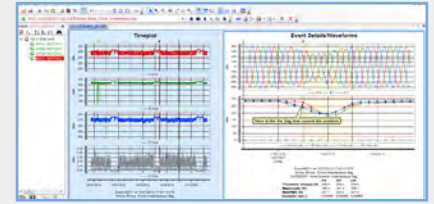
**SAFE REMOTE ACCESSIBILITY VIA DRAN-VIEW® 7, APPS AND VNC**

- 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



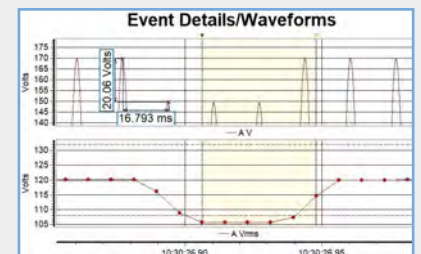
REAL TIME REMOTE CONTROL OF ALL HDPQ SERIES INSTRUMENTS

- 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



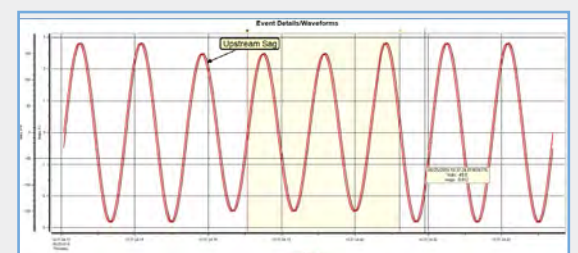
REPORTING

- 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 Short-Circuit Current:					
230.00	10.33	10.33		100.00					
Harm:	AV	AI	BV	BI	CV	CI	DV	DI	
THD	35.403	0.023	35.385	0.033	35.404	0.030			
2	0.008	0.007	0.010	0.008	0.011	0.007			
3	18.252	0.001	18.250	0.006	18.254	0.006			
4	0.008	0.008	0.008	0.005	0.008	0.005			
5	18.252	0.008	18.252	0.005	18.250	0.008			
6	0.005	0.005	0.007	0.005	0.008	0.005			
7	18.252	0.008	18.252	0.005	18.250	0.008			
8	0.005	0.005	0.007	0.005	0.008	0.005			
9	18.252	0.005	18.252	0.005	18.250	0.005			
10	0.005	0.005	0.010	0.005	0.010	0.005			
11	0.007	0.005	0.008	0.005	0.008	0.005			
12	0.007	0.005	0.008	0.005	0.008	0.005			
13	0.007	0.005	0.008	0.005	0.010	0.005			
14	0.007	0.005	0.008	0.005	0.008	0.005			
15	0.007	0.005	0.007	0.005	0.010	0.005			

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	○	○	○	○
IEC61000-4-30 Class A Ed. 3 Compliant	○	○	○	○
W, VA, VAR, PF, Demand Energy	○	○	○	○
Peak & Waveshape Transient Capture	○	○	○	○
Harmonics - IEC61000-4-7, IEEE519-2014	○	○	○	○
Flicker - IEC61000-4-15, IEEE1453	○	○	○	○
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		○	○	○
High Speed Transient Capture			○	○
400 HZ Measurements				○

COMMUNICATIONS

Ethernet	○	○	○	○
Wi-Fi		○	○	○
USB	○	○	○	○
Dran-View 7 Full Remote Control & Data Downloading	○	○	○	○
Apple & Android VNC Apps - Full Remote Control	○	○	○	○
GPS Time Synch (optional)	○	○	○	○

APPLICATIONS

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				○



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

Vthd: 0-100%, $\pm 5\%$ for $V \geq 10\%$ V_{nom} ,
V Ind Harm: DC, 2-127, $\pm 5\%$ for $V \geq 10\%$ V_{nom}
Ithd: 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)

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



FLEX CT'S



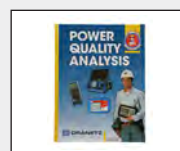
CLAMP CT'S



ENCLOSURES



MAGNETIC MOUNT



BOOKS

