







# POWER QUALITY MONITORING

TRUSTWORTHY POWER MONITORING

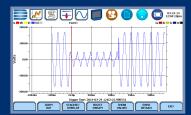


**DRANETZ HDPQ° PLUS SERIES** 

## **HDPQ PLUS SERIES**

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

## 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

#### **DRANETZ HDPQ° PLUS SERIES**

PORTABLE, 7" DISPLAY





## **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&ICONNECTIONS**

- 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° 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 optional Bluetooth
- Remote control, data analysis & reporting using Dran-View<sup>®</sup> 7
- Remote control using Android and Apple VNC Apps.



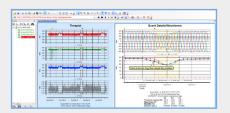


## DRAN-VIEW 7 REMOTE CONTROL, ANALYSIS & REPORTING

- Windows based power quality, demand & energy analysis
- · Powerful, yet easy to use

PAGE 4

- 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 (Free)
  - ENTERPRISE for the advanced user (included with Guide, Xplorer, and Xplorer 400)
- · Automatic (or manual) internet updates



PORTABLE POWER MONITORING

## REAL TIME REMOTE CONTROL OF ALL HDPQ SERIES INSTRUMENTS

- Remotely control the user interface as if you were in front of the meter
- · Remote real time metering
- · Remote control of all settings
- · Remotely download recorded data

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		A B C	40.389k 46.214k 46.779k	A B C	3.09 3.05 2.98		0.320 0.266 0.416	50 50/S1 52/S1	28.03 7.39 5.16
		POWS ORALI	ENERSY DOWN	MOI	BR CU	1000001		CLEAR In 22450	DIST ONE STA

### **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**

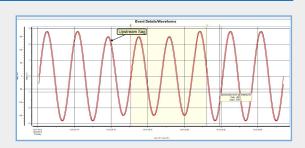
- Automatic or manual report generation
- Customizable report contents with YOUR logo
- Compliance reporting IEEE 519-2014, EN 50160 and more
- · Integrated RTF editor

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Volts	130 125 120 115 110 105	-AV			
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		Daily			Very Short (99		Fail		
Nominal voltage:			Nominal current:		Max.Demand (	Current:	Max.ShortCir Current:		
230.00		10.33			10.00		100.00		
Harm.	LAV	Al	I BV	BI	Tcv	CI	DV	DI	
THD	39.403		39.399		39.404				
TDD		0.023		0.033		0.030			
2	0.008	0.007	0.010	0.006	0.011	0.007			
3	16.092	0.007	16.090	0.006	16.094	0.008		5	
4	0.006	0.008	0.008	0.005	0.009	0.005			
5	16.089	0.006	16.088	0.005	16.090	0.008			
6	0.008	0.005	0.007	0.005	0.008	0.008			
7	16.088	0.008	16.086	0.005	16.088	0.008		8	
8	0.008	0.005	0.007	0.005	0.008	0.008			
9	16.088	0.005	16.087	0.006	16.089	0.008			
10	0.009	0.005	0.010	0.005	0.010	0.006			
11	0.007	0.008	0.008	0.008	0.009	0.008		7	
12	0.007	0.008	0.009	0.005		0.008			
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14	0.007	0.005	0.008	0.008		0.008			
15	0.007	0.005	0.007	0.005	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	<b>Guide Plus</b>	Xplorer Plus	Xplorer 400 Plus
ENCLOSURE				
Portable with 7" Touch Screen	0	0	0	O
POWER SUPPLY				
AC Mains Power - 90-264, 50/60Hz	0	<b>O</b>	0	<b>O</b>
MEASUREMENTS & MONITORING				
Power Quality - Sag, Swell, Interruption	0	0	0	0
EC61000-4-30 Class A Ed. 3 Compliant	O	O	O	<u> </u>
N, VA, VAR, PF, Demand Energy	0	0	0	0
Peak & Waveshape Transient Capture	0	0	0	0
Harmonics - IEC61000-4-7, IEEE519-2014	0	0	0	O
Flicker - IEC61000-4-15, IEEE1453	O	O	O	O
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		0	0	0
High Speed Transient Capture			0	0
100 HZ Measurements				0
Ethernet Wi-Fi	O	O O	O O	0
	~			
JSB	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Oran-View 7 Full Remote Control & Data Downloading	<u> </u>	<u> </u>	<u> </u>	<u>O</u>
Apple & Android VNC Apps - Full Remote Control	<u>O</u>	<u>O</u>	<u>O</u>	O
GPS Time Synch (optional)	0	<b>O</b>	•	0
APPLICATIONS				
PQ Surveys	O	O	O	O
Energy/Load Surveys & Studies	0	0	0	0
Data Logging	0	0	0	0
Substation Monitoring	0	0	O	0
DER/Alternative Energy	O	O	O	O
Capacitor Testing	O	O	0	O
Motor Testing		O	O	O
Advanced Load Distortion and Imbalance		0	0	0
Fault Recording / In-Rush		0	0	0
JPS, Generator Testing/Commissioning		0	0	0
Fransformer/Inrush testing		0	0	0
VSS, Protection Device Testing			0	0
Aircraft/Aviation, Naval				<b>O</b>

## **TECHNICAL DATA**

#### MEASURED PARAMETERS

(4) Differential Voltage: 512 s/c, 16 bit resolution

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

Transients: 0-1414Vpk, ±0.2 % of Udin

Transients - High Speed: 1MHz (Xplorer/400), 10-2000 Vpk, +/- 10% of

reading, +/- 0.5% FS

(4) Current: 512 s/c, 16 bit resolution

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

#### FREQUENCY:

16-25Hz, 42.5-69Hz, +/- 0.01Hz

#### 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>=10% Vnom, V Ind Harm: DC, 2-127, +/- 5% for V>=10% Vnom Ithd: 0-100%, +/- 5% for I>=10% Inom, I Ind Harm: DC, 2-63, +/- 5% for I>=10% Inom

#### 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

#### **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

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)

Bluetooth via USB adapter (optional)

VNC remote control

Android® & Apple® VNC App

## **COMMON ACCESSORIES**



CLAMP CT'S











**ENCLOSURES** 

**MAGNETIC MOUNT** 

**BOOKS** 





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