

# HDPQ®

## GUIDE GUIDE SP

### SPECIFICATIONS

#### 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 U<sub>din</sub>, range of 10%-150% of U<sub>din</sub>  
 Transients: 0-1414Vpk, ±0.2 % of U<sub>din</sub>

(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

V<sub>thd</sub>: 0-100%, +/- 5% for V>=10% V<sub>nom</sub>,  
 V Ind Harm: DC, 2-127, +/- 5% for V>=10% V<sub>nom</sub>  
 I<sub>thd</sub>: 0-100%, +/- 5% for I>=10% I<sub>nom</sub>,  
 I Ind Harm: DC, 2-63, +/- 5% for I>=10% I<sub>nom</sub>

##### 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  
 AnswerModules®- Sag/Dip Directivity, PF Cap, Motor  
 Dashboards - PQ, Demand & Energy  
 Simultaneous PQ, Demand & Energy  
 Mini Report

#### STANDARDS COMPLIANCE

##### Power Quality

IEC 61000-4-30 Class A: Edition 2 (2008)  
 IEEE 1159: 2009

#### STANDARDS COMPLIANCE (continued)

##### 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 Guide

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  
 3 hours run time on full charge, 3 hours charge time  
 AC Power: 90-264(max) 50/60Hz  
 Display: 7" WVGA color graphic, Icon based touch LCD, LED Backlit (Guide only)

##### Dranetz HDPQ Guide SP - 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 Wireless  
 USB On The Go (OTG)  
 Bluetooth via USB adapter  
 VNC remote control  
 Android® & Apple® App



# HDPQ®

# GUIDE GUIDE SP

**Dranetz HDPQ® Guide SP**  
 IP65 Enclosure - No Display, Phase Powered



**Dranetz HDPQ® Guide**  
 7" Color, Touch Display

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



## Applications

Whether your application requires power quality monitoring, demand/energy monitoring, or both, the powerful feature set of the Dranetz HDPQ® Guide family provides you the tools needed to get the job done. Dranetz HDPQ Guide instruments are perfect for applications such as PQ surveys, fault recording, inrush, motor testing, harmonic analysis, advanced distortion analysis, demand/energy/load studies, and much more.

The HDPQ Guide and Guide SP offer the exact same measurement features, but in different enclosures, that can meet the needs of a wide variety of applications and work environments. The HDPQ Guide is a portable instrument with a built in 7", Tablet like LCD display. The same local user interface is also available remotely on a PC, Tablet or Smartphone by using the built in Ethernet or Wi-Fi communications and Dran-View 7, or a free VNC remote control App. The HDPQ Guide SP offers the same measurement capabilities and communications, but is housed in an IP65 enclosure without the LCD display and can be powered from the circuit being measured. The IP65 enclosure of the HDPQ Guide SP greatly expands the applications into outdoor and harsh environments, along with those where an LCD display is undesirable.

## Advanced PQ & Energy Capabilities!

Dranetz products have a long-standing tradition of having state of the art PQ monitoring capabilities, and the Dranetz HDPQ Guide is no exception. HDPQ Guide meets and exceeds 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**

## Transient Capture

The Dranetz HDPQ Guide goes well beyond the requirements of the PQ standards by including transient capture capabilities for voltage and current, such as: transients to 32 microseconds, 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 Guide 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.

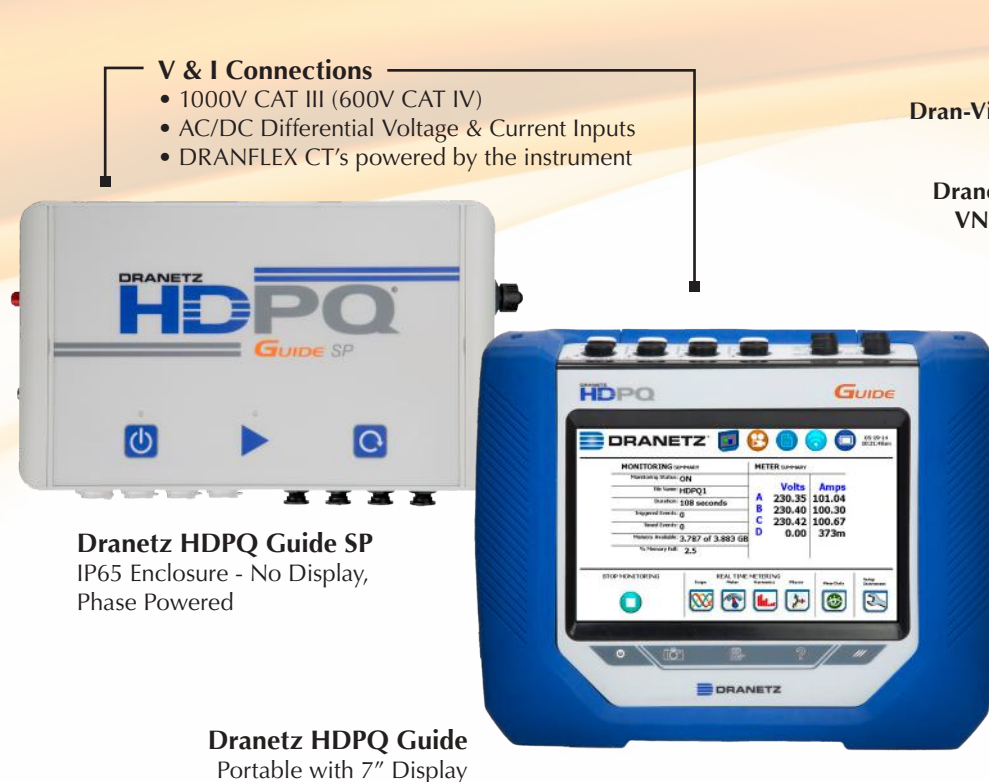
**Motor Analysis:** Enables the PQ parameters that are important to motor surveys, and provides a custom dashboard for results.



# The Best Combination of Value & Technology in a PQ Analyzer - Safe, Powerful & Intelligent

*Power Quality instruments are no different than anything else – you get what you pay for – you just get much more from the Dranetz HDPQ® Guide than with any other instrument in its class!*

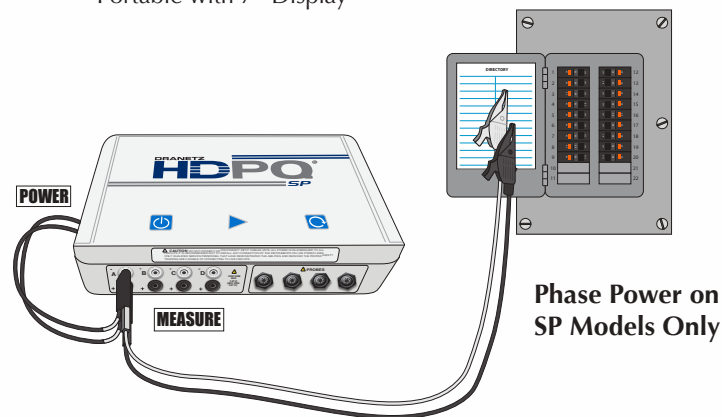
*The Dranetz HDPQ® Guide SP offers the same great value, but in a hardened IP65 enclosure and is powered from the phase!*



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

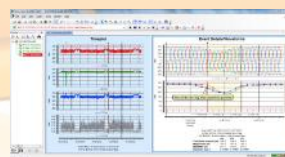
**Dranetz HDPQ Guide SP**  
IP65 Enclosure - No Display,  
Phase Powered

**Dranetz HDPQ Guide**  
Portable with 7" Display

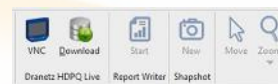


**Phase Power on SP Models Only**

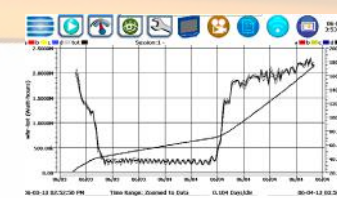
**Dran-View® 7**



**Dranetz HDPQ Live VNC & Download**



**Dashboard Display**



**Demand & Energy Trend**

## Easy to Use Intuitive User Interface

With their innovative packaging and 7" wide screen color touch display, the Dranetz HDPQ family of instruments are the most powerful and easiest 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 Guide 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 Dashboard** takes the guess work out of knowing what the instrument has recorded. The Dashboard is a color coded alarm panel with boxes that represent different event types (Sags, Swells, Transients, THD, etc.). Each box shows the real time metered values for the event type, and is color coded to indicate if events of that type have been recorded.

**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 Guide instruments with its VNC remote control, downloading, and 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 & 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 Dran-View® 7, Apps and VNC

**DON'T RISK YOUR SAFETY!** The Dranetz HDPQ Guide 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 Guide, 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 Dranview 7 or 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.

