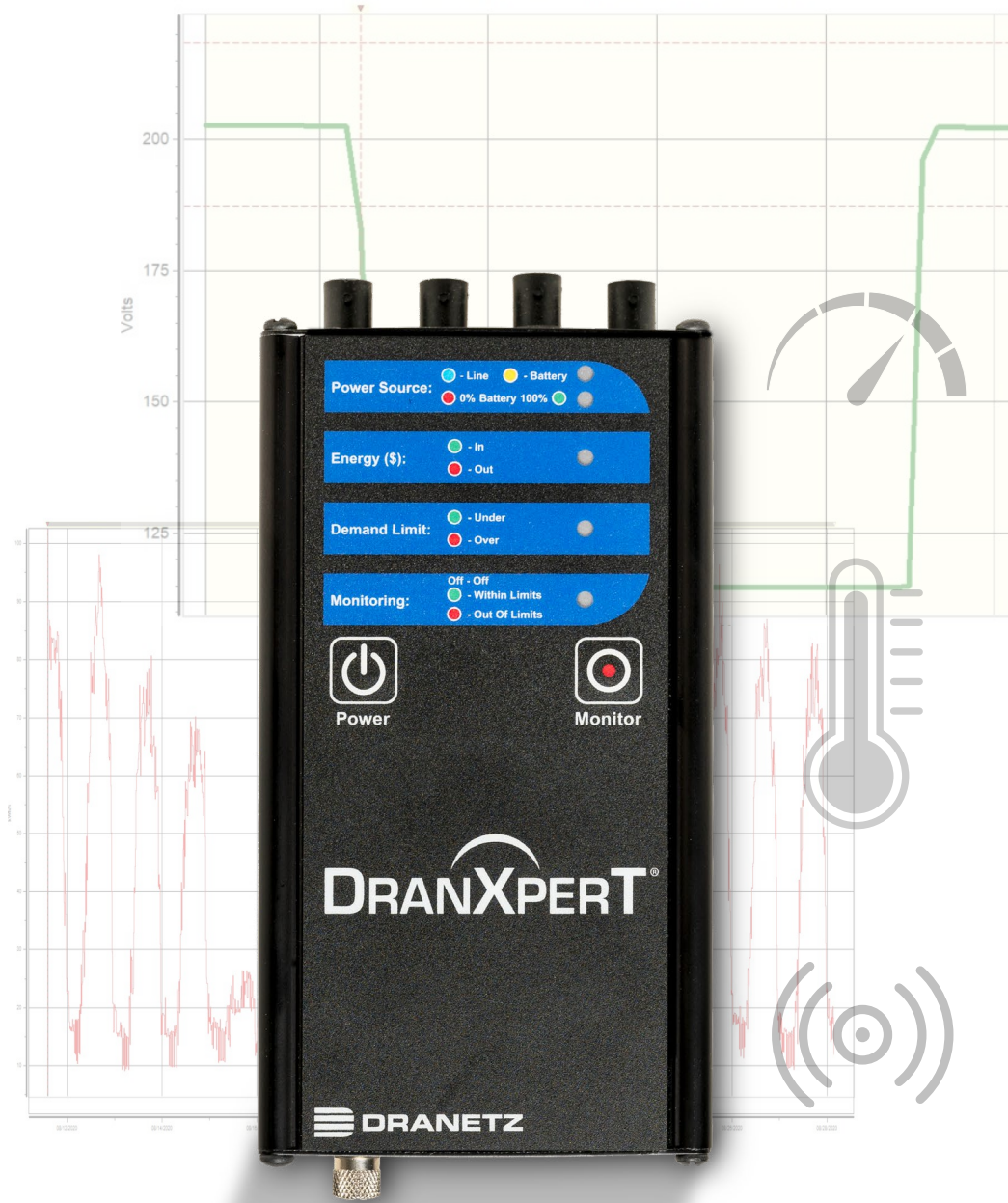


# ENERGY, POWER, AND SENSOR DATA LOGGER

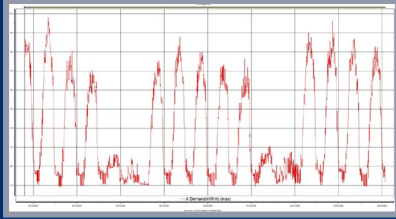
TRUSTWORTHY  
POWER LOGGING



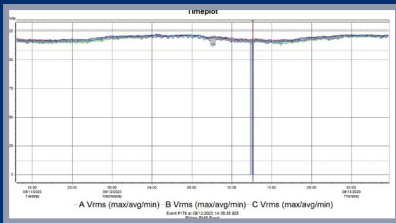
ANALOG & DIGITAL SENSORS + GPS + ACCELEROMETER

# DRANXPERT®

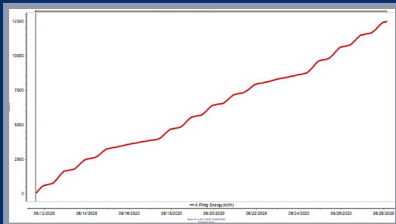
# DRAN-VIEW XP SOFTWARE



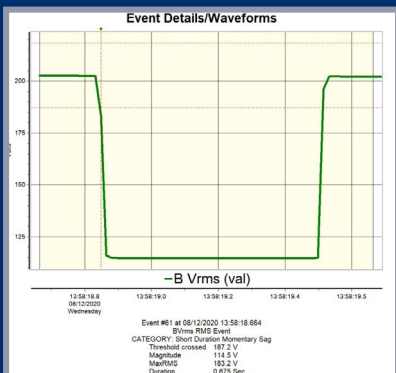
Load Trends



Voltage Trends



Energy Trends



View PQ Events

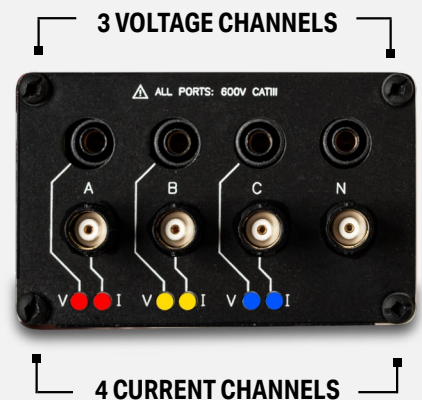
# DRANXPERT®

## LOW COST PORTABLE ENERGY/POWER LOGGER & PQ DETECTOR

- Power/energy logger & PQ disturbance/event detector
- 3 voltage channels – Direct measurements up to 600Vrms, CATIII
- 4 current channels – Compatible with Dranetz Rogowski, hinged and 0.333mv CT's from other sources (UL listed/recognized)
- 4 Analog, 2 Digital, 1 Extended Serial Bus, 1 accelerometer & GPS. Requires optional sensor module
- Measures: V, I, W (P), VA (S), VAR (Q), PF, Demand, Energy & much more
- PQ disturbance detector – Detect and records trends of RMS sags/dips, swells, current changes – **IEC 61000-4-30 1/2 cycle methods**
- Harmonic measurements & recording – Vthd, Ithd. Measurements using the methods of IEEE 519-2014/IEC 61000-4-7
- Web browser interface for real time meters, setup and data transfer
- Free, unlicensed Dran-View XP software for analysis & reporting
- **7 hr. battery runtime – Best in class**
- **Automatic wiring verification – LED's indicate wiring errors**
- Ethernet, USB communications
- Modbus, BACnet
- UL Listed/Recognized and CE Compliant
- 3 Year Warranty

### COLOR CONNECTION LED'S

Easily identify wiring errors  
Color coded to your wiring  
Correct for wiring errors



### SENSOR INPUTS (Optional)

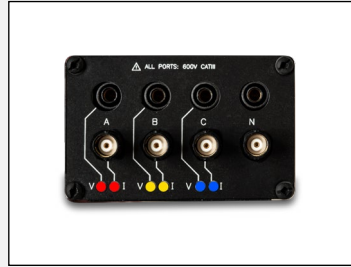
- 4 Analog
- 2 Digital
- 1 Extended Serial Bus (ESB)
- 1 Accelerometer (internal)



INCLUDES CT'S AND ACCESSORIES



SMALL AND COMPACT



3 VOLTAGE, 4 CURRENT CHANNELS



ETHERNET, USB, & OPTIONAL SENSOR INPUTS

## APPLICATIONS

### DRANXPERT IS USER FRIENDLY IN VIRTUALLY ANY LOCAL OR REMOTE POWER MONITORING APPLICATION, INCLUDING:

- **Energy audits**
- Demand side management
- Basic PQ surveys
- **NEC 220.87 load monitoring**
- Check metering
- Sub metering
- Tenant metering
- Alternative energy production & DER integration
- Energy cost allocation
- Load profiling
- Power factor studies
- Residential applications including energy usage and PQ detection

### INDUSTRIES INCLUDE, BUT ARE NOT LIMITED TO:

- Utility
- Commercial
- Industrial
- Manufacturing
- Electrical contractors
- Property management & real estate
- Petrochemical & Chemical
- Hospital & healthcare
- Oil exploration

### SENSOR INPUT APPLICATIONS (OPTIONAL) IN PARALLEL WITH POWER MONITORING:

- Environmental monitoring – temperature, humidity, light & more
- Utility/energy pulse counting – electricity, gas, steam, water & more
- Alarm monitoring – breaker/protection, switching, out of specifications, contacts, security & more
- Accelerometer – vibration, motors, rotating machines, process, seismological & more
- GPS location and time



Example: Power & Temperature Recorded Simultaneously

# TECHNICAL DATA

## GENERAL

- Sampling Frequency: 32ksps (recorded and real-time meters), 128 samples per cycle (periodic waveform snapshots)
- Sag/dip, swell trigger resolution: 1 cycle (uses IEC 61000-4-30 Class S methods)
- Panel indicators: RGB LEDs for monitoring on/off, energy flow, PQ event indication, battery charging/status, wiring status
- Storage Capacity: 8GB
- UL, CE

## VOLTAGE (3)

- Range: 90 to 600Vrms CATIII
- Accuracy: 90 Vrms to 600Vrms =  $\pm 0.1\%$ ,  $<90$  Vrms =  $0.5\%$
- Connections: 4 safety banana voltage inputs – 3 phase voltage and 1 neutral/reference

## CURRENT (4)

- Input: 0.333 VRMS full scale, Connections: BNC
- Accuracy:  $\pm 0.1\%$  + probe

## FREQUENCY

- Range: 50Hz = 45Hz to 55Hz, 60Hz = 55Hz to 65Hz
- Accuracy: 50/60Hz:  $\pm 0.001$ Hz

## POWER QUALITY

- Sag/dip, swell trigger threshold resolution: 1 cycle
- Vthd:  $\pm 5\%$  for  $V \geq 10\%$  Vnom
- Ithd:  $\pm 5\%$  for  $I \geq 10\%$  Inom + probe error

## ENERGY PARAMETERS (Probe Dependent)

- (True/Active) Energy (P): 0.1%
- Reactive Energy (Q): 0.1%
- Apparent Energy (S): 0.1%
- Fundamental Active Energy(P): 0.2%
- Fundamental Reactive Energy(Q): 0.2%
- Fundamental Apparent Energy (S): 0.2%
- Demand: 0.2%

## POWER PARAMETERS (Probe Dependent)

- (True/Active) Power (P): 0.2%
- Reactive Power (Q): 0.2%
- Apparent Power (S): 0.2%
- Fundamental Active Power(P): 0.2%
- Fundamental Reactive Power (Q): 0.2%
- Fundamental Apparent Power (S): 0.2%
- Power Factor (PF):  $\pm 0.001\%$

## SENSOR INPUTS (Optional)

- Analog (4 isolated): 0-10Vdc/4-20ma, 1KHz sampling, 0.6%, 30Vdc max
- Digital (2): 5Vdc/12Vdc/24Vdc, 1KHz sampling, 30Vdc max
- Accelerometer (1): 250Hz max sample rate
- GPS (1): Time. Location logging, 60-90 sec update rate
- ESB (1): 4-wire, 100Khz baud rate, 10ft cable max

## INSTRUMENT POWER

### LINE POWER SUPPLY

- Range: 90 to 264 VAC, 47 to 63Hz, Consumption: 15W max
- Line cords/plugs: Localized – US, EU, UK, Australia available

### INTERNAL BATTERY

- Rechargeable lithium Ion battery pack (UL recognized)
- Run time: 7 hours (typical), Charge time: 15 hours (typical)

## COMMUNICATION INTERFACES

- Ethernet: 10Mbps
- USB: 2.0
- Protocols: Modbus, Bacnet

## ENCLOSURE & MECHANICAL

### MECHANICAL

- Weight: 1.4 lb. (0.64Kg)
- Dimensions: 3.5" W x 2.2" H x 7.4" L (6.4 cm x 8.9 cm x 18.8cm)
- IP50 (vertical position)

### ENVIRONMENTAL

- Storage Temperature: 5 to 131 °F (-15 to +55 °C)
- Operating Temperature: 32 to 113 °F (0 to +45 °C)
- Humidity: 5% to 95% non-condensing

# ORDERING INFORMATION

## DRANXPRT PACKAGE ORDERING INFORMATION

### Popular Rogowski Packages

DXPT-F500-16PKG-xx: 500A 16" Flex CT package  
DXPT-F1500-16PKG-xx: 1500A 16" Flex CT package  
DXPT-F3000-16PKG-xx: 3000A 16" Flex CT package  
Also available with 24" & 36" lengths

### Popular Rogowski Packages With Sensor Inputs

(Includes analog & digital inputs, GPS only)

DXPT-S-F500-16PKG-xx: 500A 16" Flex CT package  
DXPT-S-F1500-16PKG-xx: 1500A 16" Flex CT package  
DXPT-S-F3000-16PKG-xx: 3000A 16" Flex CT package  
Also available with 24" & 36" lengths

xx: Enter line cord code - US, EU, UK, AU (Australia)

Each package includes: DranXperT, (3) CT's, voltage cables/clips, carry case, Dran-View XP software (download), line cord

## AVAILABLE CT'S

### Rogowski

FLEX-500A-16: 50-500A, 1%, 16"  
FLEX-1500A-16: 150-1500, 1%, 16"  
FLEX-3000A-16: 300-3000A, 1%, 16"  
Also available in 24" and 36" lengths

### Hinged

CT-H-5A: 5A, 0.5%, 0.4" window  
CT-H-20A: 20A, 0.5%, 0.4" window  
CT-H-50A: 50A, 0.5%, 0.4" window  
CT-H-100A: 100A, 0.5%, 1.0" window  
CT-H-600A: 600A, 0.5%, 1.38" window

