

Dranetz Inc
GOLD Sponsor
PQSynergy™ 2015



11th year as a Gold Sponsor

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Dranetz-BMI-Electrotek Introduction

Dranetz-BMI

Founded in 1962 in Edison, NJ USA

Electrotek Concepts Inc

Engineering Company

Dranetz-BMI-Electrotek Asia 2004



Asia Management Regional Technical support
and service centers.

Office Locations



Edison, New

Dayton, Ohio

Knoxville, Tennessee

Beverly, Massachusetts

- Headquartered in Edison, New Jersey (NYC)
- Wholly owned by Gossen Metrawatt Co
 - (A German company about US\$100 Million)
- Dranetz Technologies 1962 by Abe Dranetz.
- Merged with Basic Measuring Instruments in 1998. To form Dranetz-BMI-Electrotek
- 2004 Dranetz Asia formed with Power Quality Thailand LTD (PQT founded 1986)
- 2011 Rebranded to Dranetz



DRANETZ™

THE STANDARD FOR ENERGY & POWER MEASUREMENT



A
GOSSEN METRAWATT
Company

- Dranetz Inc manufacturer of Power Quality Instrumentation Systems and portable instruments
- Electrotek Concepts, Inc., engineering company for power quality engineering software PQview III/IV
- GMC USA Hand held meters and safety testers from Gossen Metrawatt.
 - (USA distribution, limited distribution in Asia)
- Dranetz Asia Marketing and Sales
 - (contracted to Power Quality Thailand LTD)
- Dranetz Asia technical support and service centers in Thailand and Malaysia
 - (contracted to Power Quality Thailand LTD)

Handheld **DMMs**

Portables

for PQ troubleshooting
and safety testing

Permanent Systems

proactive Quality of
Supply performance
monitoring and
Smartgrid applications



Portable 3 Phase Power Quality Monitors

DRAN-VIEW
Power Quality Browser



Dran-View Enterprise
Version 6.0.19

Input config Transients RMS Variations Waveform Capture Journal Limits Journal Interval Characterizer

Instrument Type: PowerXplorer PX5

Site Name: DRANSET_02 Version: 2.7.0

Circuit Type Selection:

3 Phase WYE

Nominal Values:

Nominal Frequency: 60 Hz Tracking...

Nominal Voltage: 120 volts

Nominal Current: 5 Amps

Scale factors:

	Volts	Amps
A	1	1
B	1	1
C	1	1
D	1	1

Click Here! to Create a Preset.



Being introduced in Asia Sept 2014

DRANETZ™
HDPQ

New, Revolutionary Power Quality Instruments From Dranetz



Revolutionary power quality monitors - the Dranetz family of HDPQ

Software for portables

- Dranview 6
- Dranset
- Dranview 7 (release Sept 2014)

Electric Utilities

Electricité de France
 Enea –Poland
 KW Belchatow - Poland
 Energa – Poland
 PSE - Poland
 Electrabel – Belgium
 Fecsa Endesa
 Gesa Endesa
 Unión Fenosa Distribución
 EDF Energy
 United Utilities
 Northern Electric
 Western Power Distribution
 Companhia de Electricidade, Macau
 JiangSu EPRI, China
 Sunnfjord Energi A/S/ Norway
 India

ELES - Elektrogospodarstvo Slovenije Slovenia
 Elektro Primorska Slovenia
 HEP Transmission Company Croatia
 HEP Distribution Company Croatia
 Guangdong EPRI - China
 Shanghai Municipal Electric Power Company
 Shanxi EPRI - China
 Companhia de Electricidade, Macau
 JiangSu EPRI, China
 Sunnfjord Energi A/S/ Norway
 Shanghai Municipal Electric Power Company
 Shanghai Metro Traffic Co
 China EPRI
 HEFEI EPRI
 PEA/MEA Thailand
 PG Singapore
 Meralco Philippines
 TNB Malaysia
 SEB Malaysia
 Indonesia

Finance / Banking

Banco de Peru
 Banco Popular
 Bloomberg, UK
 Credit Suisse, UK

Commercial / Industrial

Olmex- Poland	AIB Vinçotte
Cuprum –Poland	Port of Antwerp
Hewlett Packard – Netherlands	European Research Inst. Power Quality Control – Spain
Kemira GrowHow Netherlands	Fundación Labein
Opel Belgium Antwerp	Ayuntamiento Zaragoza
Volvo Ghent	Instituto de Tecnología Eléctrica
Corus – Nthlds	Revoz/Renault Slovenia
AluminumSolvay	Shanghai Metro Traffic Co
Daikin Europe	
IBM JAPAN	
Belgian Navy	

Consultant / OEM

Gamesa Eólica-Spain
 Molinos del – Spain
 EbroCiemat-Spain
 Chloride Power Protection
 Halcyon Drives
 MGE

International Customers portables

Railways

Metro de Madrid, S.A.
Dimetronic-Spain

Government

A.E.N.A. - Aeropuerto de Barajas
A.E.N.A. - Aeropuerto de Barcelona
A.E.N.A. - Aeropuerto de Gerona
A.E.N.A. - Navegación
AéreaRetes 22
Arsenal Militar del Ferrol
London Air Traffic Control
MI-5

Commercial / Industrial

Olmex- Poland
Cuprum –Poland
Hewlett Packard –
Netherlands
Kemira GrowHow
Netherlans
Opel Belgium Antwerp
Volvo Ghent
Corus – Netherlands
AluminumSolvay
Daikin Europe
Zardoya Otis
Shanghai ZhengHua
Harbour Machinery
Corp.
Siemen China Factory
Automation Co.
Ltd/GDEPRI
IBM Japan

AIB Vinçotte
Port of Antwerp
European Research
Inst. Power Quality
Control – Spain
Fundación Labein
Ayuntamiento
Zaragoza
Instituto de
Tecnología Eléctrica
CEPSA, S.A.
Peugeot
EspañaAcerinox
Pfizer, UK
Renault, Sovenia
Sintef
Statoil
SKYGUIDE
Pfizer, UK
Renault, Sovenia
Elgar Sorenson

Computer / Information / Telecom

Vodafone España, S.A.
TVE
Informatica del Ayuntamiento de
Madrid SDC Ltd

Consultant / OEM

Gamesa Eólica-Spain
Molinos del –Spain
EbroCiemat-Spain
NAVANTIA - Astillero del Ferrol
STM de Alta Tension
Construcciones y Montajes
Industriales
Sistemas Electrónicos de Potencia
Mimaven Electrica
Tempe, S.A
Fullink UPS
Socomec

Education

Universidad de Zaragoza
Universidad de Málaga
Universidad Politécnica de Cartagena
Universidad de Oviedo
CITCEA - Universidad Politécnica de Cataluña
Universidad de Sevilla
Universidad de Cordoba
Universidad de Vigo
Universidad de Vigo

User list in China --Portables

- China EPRI (more than 15 units)
- Jiangsu Utility (more than 30 units)
- Zhejiang EPRI
- Anhui EPRI
- Henan EPRI
- Norther China EPRI
- Jiangxi EPRI
- Fujian EPRI
- Shanxi EPRI
- Hebei EPRI
- Guangdong EPRI
- Guangxi EPRI
- Sichuan EPRI
- Hubei EPRI
- Shanghai Utility
- Hunan EPRI
- Jilin EPRI
- Eastern China EPRI
- Inner Mongolia EPRI
- Guangdong Telecom
- Beijing Satalite Communication
- Telecommunication Research Institute
- Siemens China
- GE Medical China
- Nan Jing Petro-chemical
- Shanghai Railway Research Institute
- HP China
- Beijing Capital Airport
- Bao Iron & Steel
- Intel Shanghai
- Shanghai Subway
- Emerson China
- Shanghai JiaoTong University
- SMICS Shanghai
- Aritime Intelligent Control
- Shanxi Yellow River Diversion Engineering
- Quartz GE China
- Aerospace 704 Institute
- Guangdong Ningde Nuclear Power Station
- Southern East University
- GuangDong DaYaWan Nuclear Power
- Shanghai Ship Transportation R&D
- Institute
- Zhen Hua Port Machinery Company



Power Quality Monitoring Systems worldwide use by
Electric Utilities for new SmartGrid
Applications

Model 61000 Family



- **Permanent Power Quality Monitoring**
- **For use in Transmission and Substations and important customers.**
- **Web based User interface for ease of use**
- **Answer modules characterize data and provide automatic analysis**
- **Meet the Chinese GB/T 14549 and IEC 61000-4-30 requirements**



List of Encore Systems in China

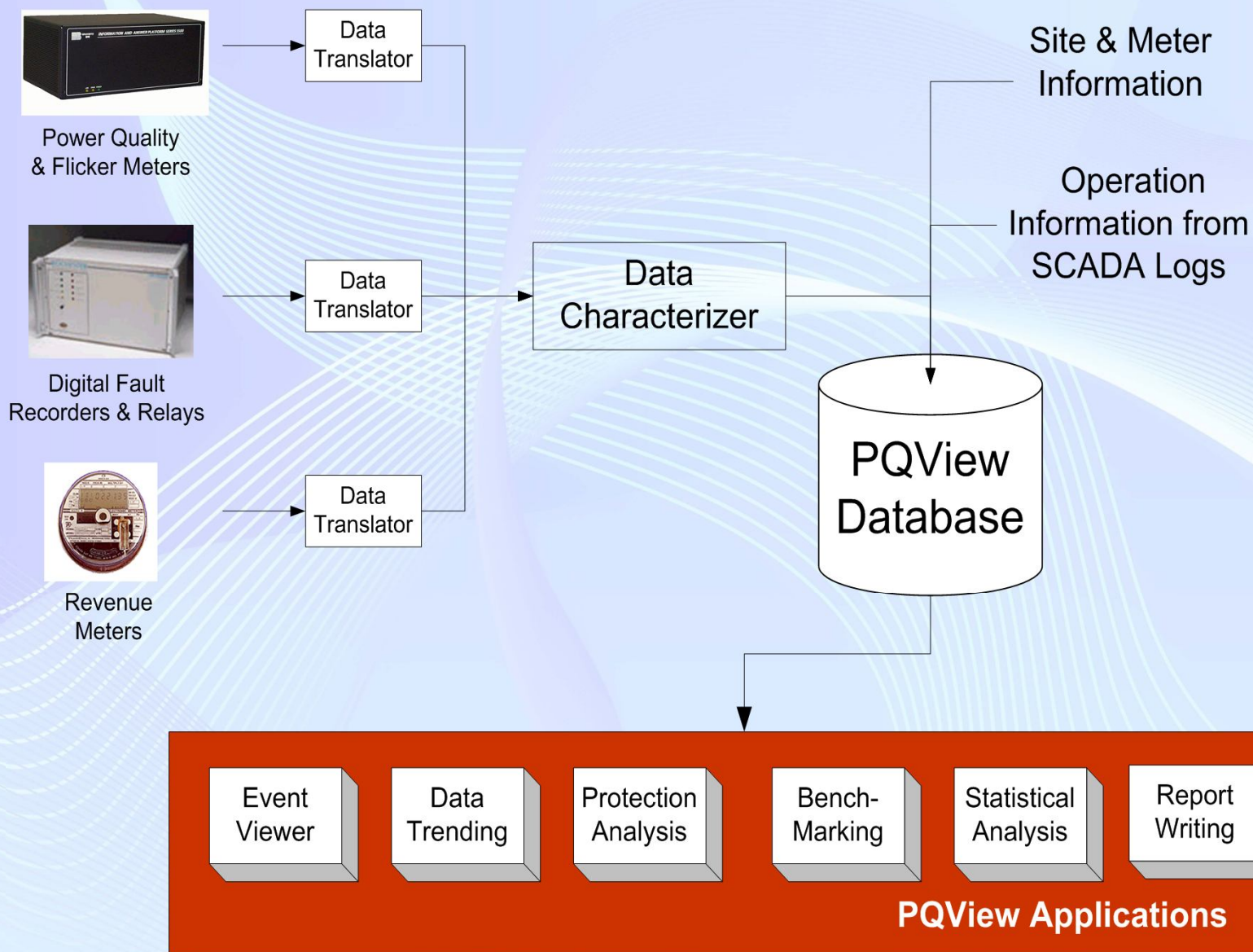
- Guangdong Provincial Electrical Power Corp. (more than 230 units)
- Shanghai Electrical Power Corp. (more than 150 units)
- Beijing Electrical Power Corp. (Monitoring for Olympic 2008 Venues)
- Northern China EPRI
- Jiangsu EPRI (more than 80 units)
- Shanxi EPRI (more than 70 units)
- Guangxi EPRI (26 units)
- China EPRI
- Sichuan EPRI
- Chong Qing Utility
- Hang Zhou Utility
- Shao Xing Utility
- Intel, Shanghai
- Guangzhou Honda Auto
- Si Chuan Optical Fiber
- Shanghai Metro Company
- Guangzhou Honda Auto
- Si Chuan Optical Fiber
- Dong Guan Power Company, Guang Dong Province
- Yun Nan Power Grid Company
- GuangZhou Toyota Motor
- GuangZhou Metro Company

Software for PQ monitoring systems

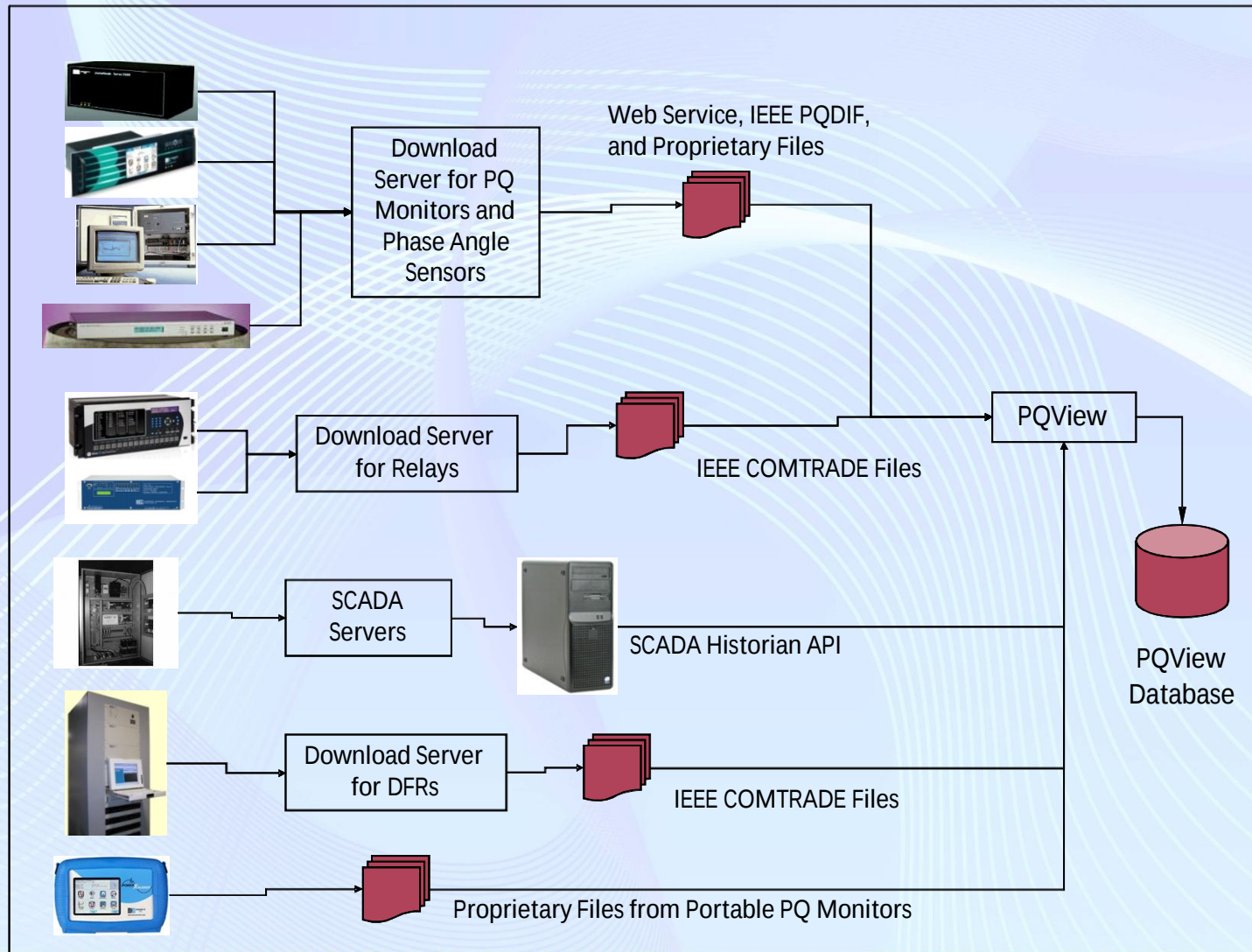
- PQView III
 - Constant development since 1995
 - Funded by utilities worldwide
 - Dominate market share for SmartGrid
- PQView IV (in development) Release 2016
 - Funded by Electric Utilities Worldwide
 - and EPRI USA

PQView® Overview

PQView® Architecture



Overview of Data Integration



PQView and PQWeb

- Power Quality Database Management and Analysis System
 - Utilizes many different meter file formats for data sources
 - Manages databases as large as one terabyte with billions of events and hundreds of billions of samples
 - Supports many simultaneous Internet/intranet users
 - Empowers analysis through workstations and web browsers
 - Presents event lists, waveform/rms plots, derived characteristics
 - Creates steady-state trends, histograms, and statistics
 - Offers most complete analysis package for voltage sags in the electric power industry
 - Generates user-defined reports in Word and HTML formats
 - Ascertains compliance with IEEE and IEC standards
 - Calculates indices and benchmarks systems
- First version released in 1993 with continual development and enhancements for more than a decade through the investments and direction of our electric utility customers.

Who Uses PQView Today?

United States/Canada

- American Electric Power
- Alabama Power Company
- Baltimore Gas and Electric
- CMS Energy
- CPS Energy San Antonio
- Consolidated Edison Company of New York
- Detroit Edison Company
- Dominion Virginia Power
- Duke Energy Corporation
- East Kentucky Power Cooperative
- EnerNex Corporation
- Entergy Services
- EPRI
- Federal Aviation Administration
- FirstEnergy
- Georgia Power Company
- Hawaiian Electric Company
- Hydro One Networks
- Hydro Ottawa
- Knoxville Utilities Board
- Maui Electric Company
- Mississippi Power Company
- NIST
- Nebraska Public Power District
- Northeast Utilities

- Pepco Holdings, Inc.
- Public Service Electric and Gas Company
- Public Service of New Hampshire
- Salt River Project
- San Diego Gas and Electric
- Southern California Edison
- Southern Company
- Tennessee Valley Authority
- United Illuminating Company
- Wisconsin Public Service
- Wireless from AT&T

Asia-Pacific

- Beijing Utility
- Companhia de Electricidade de Macau (CEM)
- Guangdong Power
- Guang Xi Power Grid
- Hebei EPRI
- Henan EPRI
- Malaysia Utility SEB
- Northern China EPRI
- Orion New Zealand Ltd.
- Provincial Electricity Authority
- Shanghai Municipal Electric Power Company
- Shanghai Jiu Long Electric Power Science & Technology Company
- Shanxi EPRI
- Transpower New Zealand
- Yunnan Power Grid

Latin America

- Central Hidroeléctrica de Caldas
- Operador Nacional do Sistema Eléctrico

Europe

- Agder Energi Nett AS
- BKK Nett AS
- CEE Energiteknikk AS
- Central Networks (E.ON)
- Elektro Slovenia
- Elektrobistand
- Hålogaland Kraft AS
- Helgelandskraft AS
- Hydro Aluminium AS
- Hrvatska Elektroprivreda (HEP)
- Istad Nett AS
- Lyse Nett AS
- Nordmøre Energiverk AS
- Notodden Energi AS
- PSE-Operator
- Rødøy-Lurøy Kraftverk AS
- SFE Nett AS
- Skagerak Nett AS
- SINTEF
- Statnett
- StatoilHydro
- Sunnfjord Energi AS
- Sweco Grøner AS
- Tafjord Kraftnett AS
- Tussa Nett AS



Dranetz portable instruments

- Highest performance hardware for Power Quality Monitoring
- Highest performance software for data analysis
- Focused sales, marketing efforts for PQ
- Competitive pricing and 3 year warranty
- Local Training for instruments and software
- Local training by International Power Quality expert with 25 years experience
- Regional service center in Thailand and Malaysia

Dranetz Encore 61K systems

- Highest performance hardware for PQ.
 - Not an enhanced revenue meter
- Cost competitive with multi-module instrument
- Easy to use software
- Access to PQview

PQview

- Only software that can input data from any brand of instrument.
- Only software that supports automatic fault locations
- Only software that offers fully automated report writing.
- Only software that offers all industry standard Power Quality indices and reports

•Thank You