SATEC Powerful Solutions

UTILITY ◦ COMMERCIAL ◦ INDUSTRIAL ◦ RESIDENTIAL

ENERGY
MANAGEMENT
SOLUTIONS

METERING | SOFTWARE | PROFESSIONAL SERVICES

SATEC Overview

30+years of innovation as a technology leader in Electrical Power and Power-Quality

Hardware solutions for primary service or sub-metering

Advanced Software solutions include SATEC's ExpertPower Dashboard and Reporting/Analysis/Billing Features

SATEC's Billing Service Team provides custom tenant billing services as a full service offering with expertise in local regulations

SATEC has a unique reputation of being the *standard* people can rely on for measuring energy usage, load profiling, and precise recording of faults and power quality events

Corporate headquarters located in Union, NJ

SATEC is a member of the New Jersey Business and Industry Association and the New Jersey Technology Council

Union, NJ headquarters

SATEC Hardware Solutions

Electrical Monitoring Solutions:

- Over a dozen models of metering hardware to fit customer applications
- Metering for Building Main, Critical Loads, Distribution, and Sub-Metering for ASHRAE or LEED requirements
- Tenant (Commercial/Residential) Sub-Metering solutions

Features:

- Revenue Grade ANSI C12.20 and IEC62053-22
- Resilient Historical Data Trending Solutions using Time-Stamped non-volatile on-board memory with programmable logging
- Volt/Amp/Power/Energy/PF/Harmonics/Directional energy/Time-Of-Use/more...
- Open Protocol Communication: Easily integrate with SCADA/BMS

PM130-PLUS

BFM Series: Multi-Point and Fault Recording

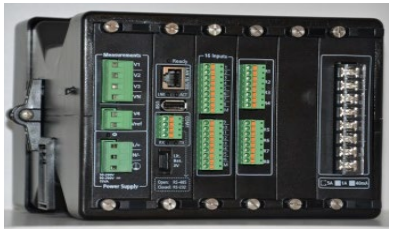
EM133- Din Rail Mount

PRO Series: Latest Generation

SATEC Hardware Solutions

Advanced Power Quality:

- Fault Recording with High-Speed event triggering using advanced hardware
- Identifying Sag/Swell/Transient/Alarms/External Inputs from Relay's
- Multi-channel waveform recording with high precision customizable logs
- Sequence of Event with dozens of inputs and advanced software analysis
- PMU Syncrophasor
- Harmonic Analysis with directional harmonics and high order harmonics
- Alarm input/output, Programmable Control, open protocol SCADA/BMS integration, Long term historical data trending, Directional Energy totalizers, advanced Time Of Use programmable seasonal rate schedule accumulators



PM180 Series

RGM-180 Remote Display

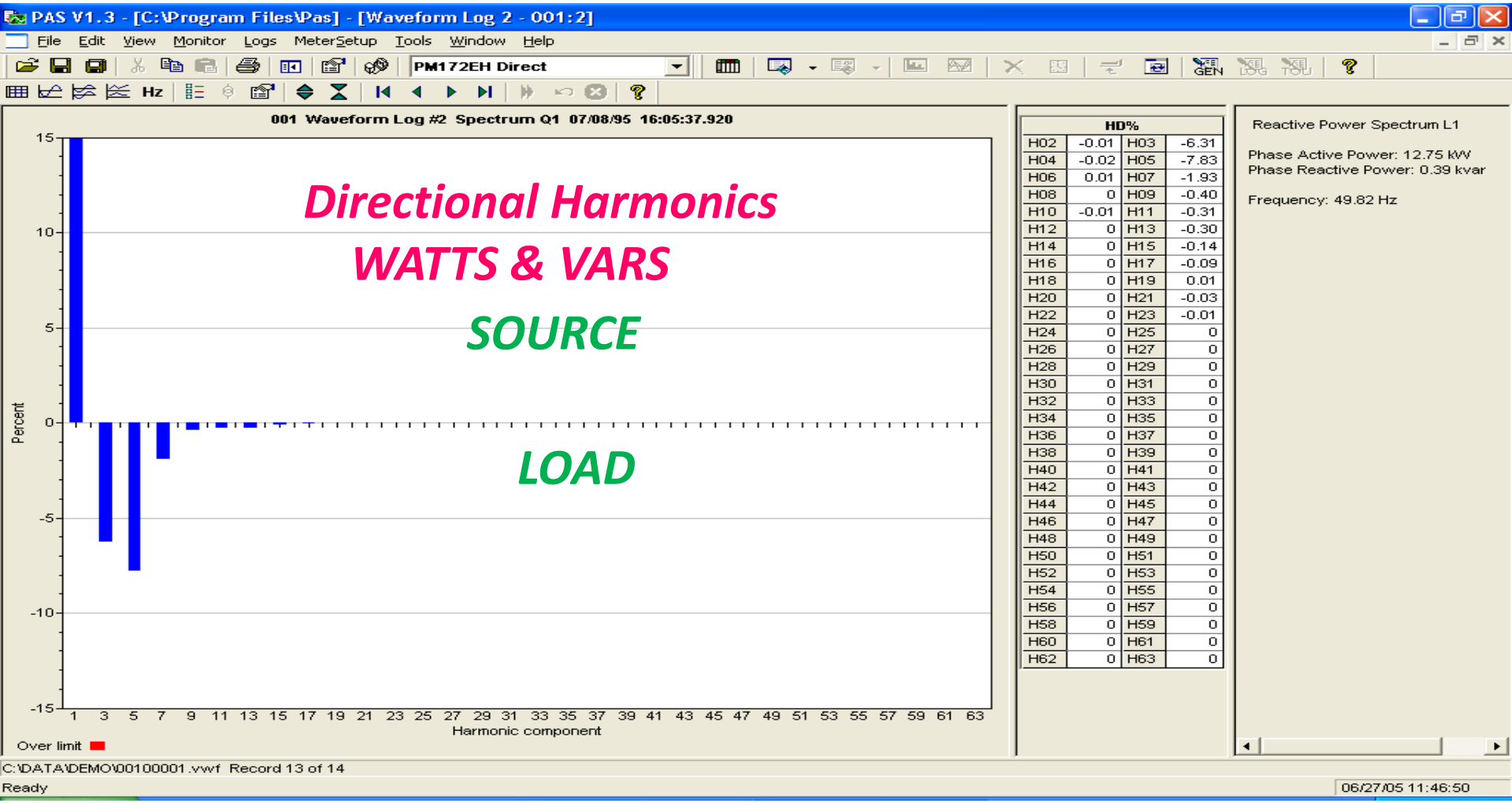
PM172 Series

PM174 Series

EM920 Series

SATEC Data Management Solutions

Detailed Harmonic Analysis



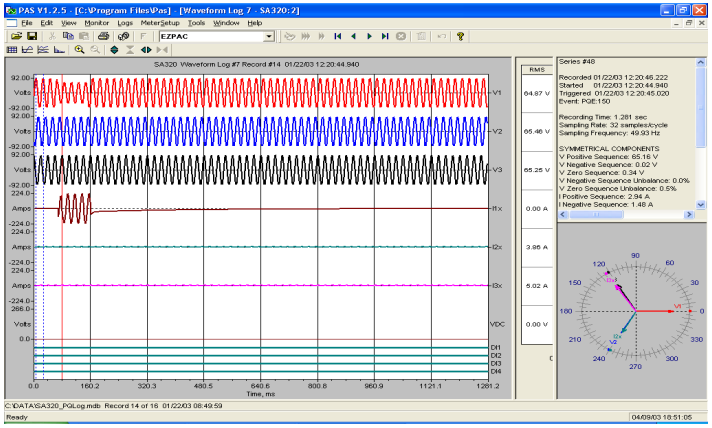
HD%			
H02	-0.01	H03	-6.31
H04	-0.02	H05	-7.83
H06	0.01	H07	-1.93
H08	0	H09	-0.40
H10	-0.01	H11	-0.31
H12	0	H13	-0.30
H14	0	H15	-0.14
H16	0	H17	-0.09
H18	0	H19	0.01
H20	0	H21	-0.03
H22	0	H23	-0.01
H24	0	H25	0
H26	0	H27	0
H28	0	H29	0
H30	0	H31	0
H32	0	H33	0
H34	0	H35	0
H36	0	H37	0
H38	0	H39	0
H40	0	H41	0
H42	0	H43	0
H44	0	H45	0
H46	0	H47	0
H48	0	H49	0
H50	0	H51	0
H52	0	H53	0
H54	0	H55	0
H56	0	H57	0
H58	0	H59	0
H60	0	H61	0
H62	0	H63	0

Reactive Power Spectrum L1

Phase Active Power: 12.75 kW
Phase Reactive Power: 0.39 kvar

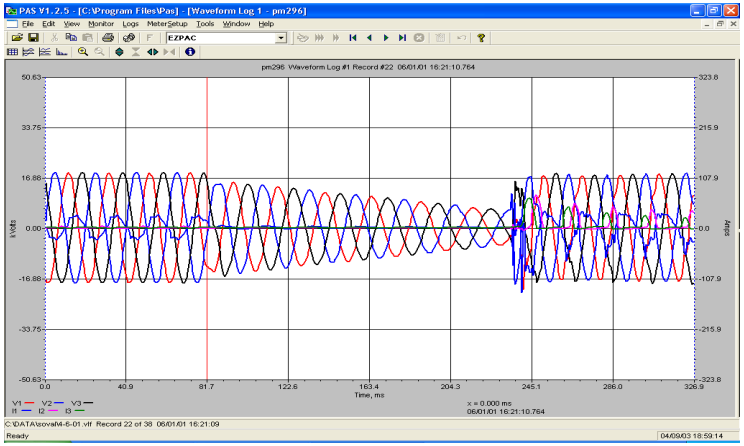
Frequency: 49.82 Hz

Three *Simultaneous* WAVEFORM RECORDERS LOGS



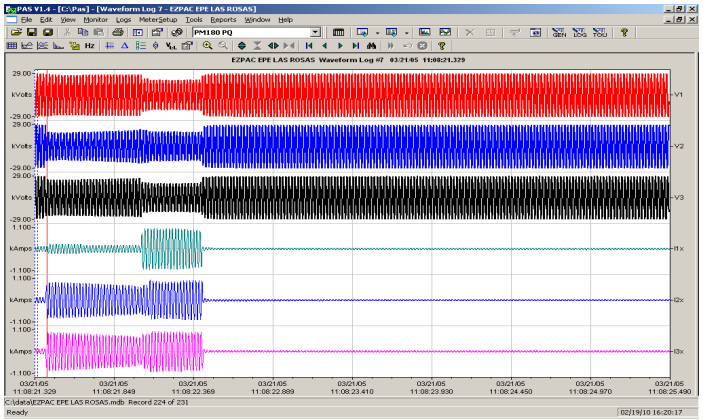
Waveform LOG #1-For System Protection Group

10 Channels at 128 samples / cycle – 64 cycle snapshot
Includes DC and 48 Digital Inputs
FAULT RECORDING – DC - BREAKER - SOE



Waveform LOG # 3 -For Motor Startup

64 samples / cycle – 10800 cycle snapshot (3 Min)

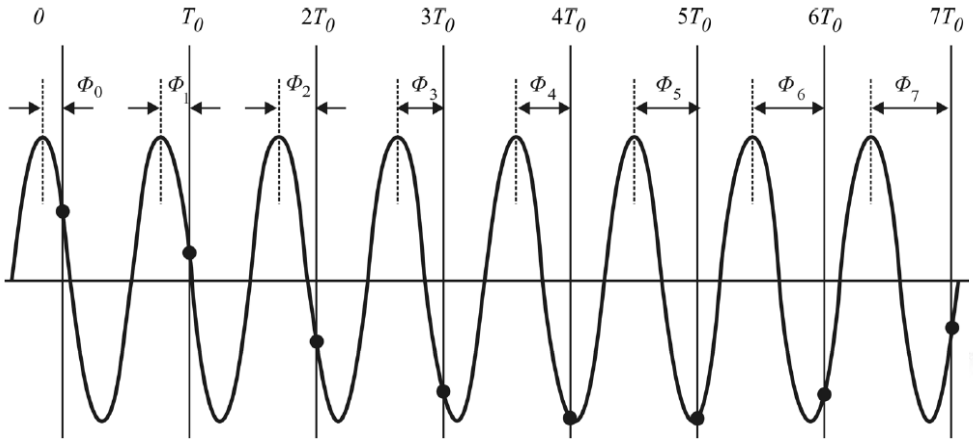


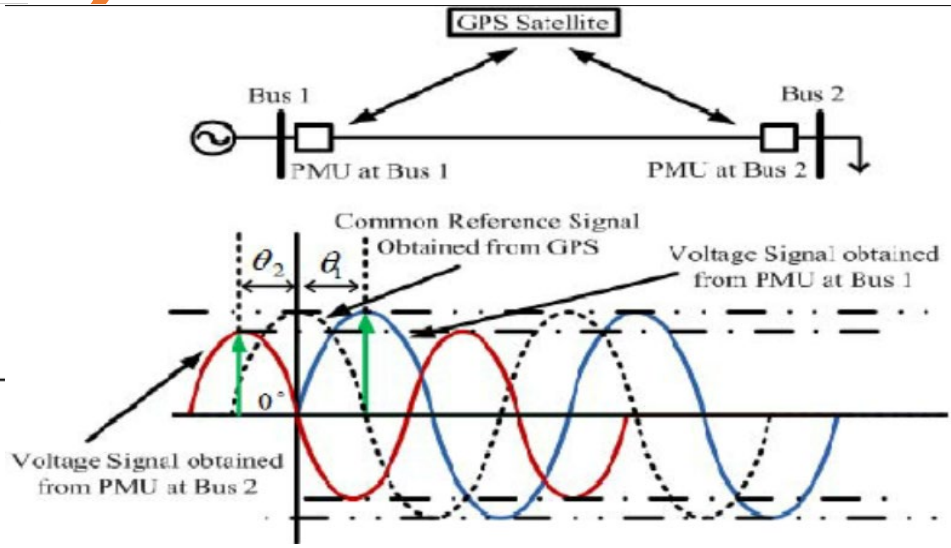
Waveform LOG # 2-For Power Quality Group

8 Channels 1024 samples / cycle
32 cycle snapshot
SAGS – SWELLS – IMPULSES
As per IEEE-1159 categories

Phasor Measurement Unit (PMU)

IEEE Std C37.118.1-2011
IEEE Standard for Synchrophasor Measurements for Power Systems





IEEE Std. C37.118.1 - 2014

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