Oracle
Portable Power Analyzer

- 3-Ø Model - ORACLE

- A rugged full-featured instrument measuring all essential power quality data including Harmonics & Demands.

- Measures Voltage, Current, Power, Energy, Events, THD, Individual Harmonics, Frequency & Power Factor.

- Real-Time, display of odd Harmonic Content up to 9th in ORACLE.

- Data retrieval through USB port.

Applications :

- Energy audits and forecasting

- Load balancing

- Power factor surveys

- Power quality investigations

- Billing verification

- Harmonic surveys & analysis for filter design

- Load profiling

- Substation monitoring

Portable Power Analyzers -Oracle

The new Oracle is the latest innovations of the previous successful Portable Power Quality Analyzer
platform. It incorporates newly enhanced key features including a faster ARM Processor to support continually evolving
capabilities, a complete 8 MB of nonvolatile internal memory and auxiliary power input capabilities.

Power Quality data can be downloaded from the instrument to PC or Laptop.

The standard software utility has been enhanced to fully support the new functionality and is included at no cost
with every Oracle sold.

The Oracle record power quality and power flow information simultaneously. The recorded information can be
viewed via the built-in graphics display & downloaded to a computer using the USB interface.

Trinity offers a comprehensive line of flexible voltage probes and clamp-on current probes for use with Oracle

Comprehensive Measurement:

- All readingsh are True RMS measurements.
- Fast, real-time cycle by cycle measurements, at 80 samples/cycle
- Four quadrant readings (Power Factor).
- Min/Max. Values.
- KVA and KW Demands.

Data Logging:

- ON board 8 MB of memory in Oracle.
- Log all Min./Max. Values.
- Log all electrical parameters, real-time and integrated (energies and demands) and harmonics to get
  complete Energy system snap-shot.
- Event Logging: Four events ca be programmed by the user for parameter, high-low, time delay and value
  (Oracle).

Display:

320X240 color TFT in ORACLE. Graphical display makes it possible to present harmonic data in histogram waveforms
of all voltages and currents.
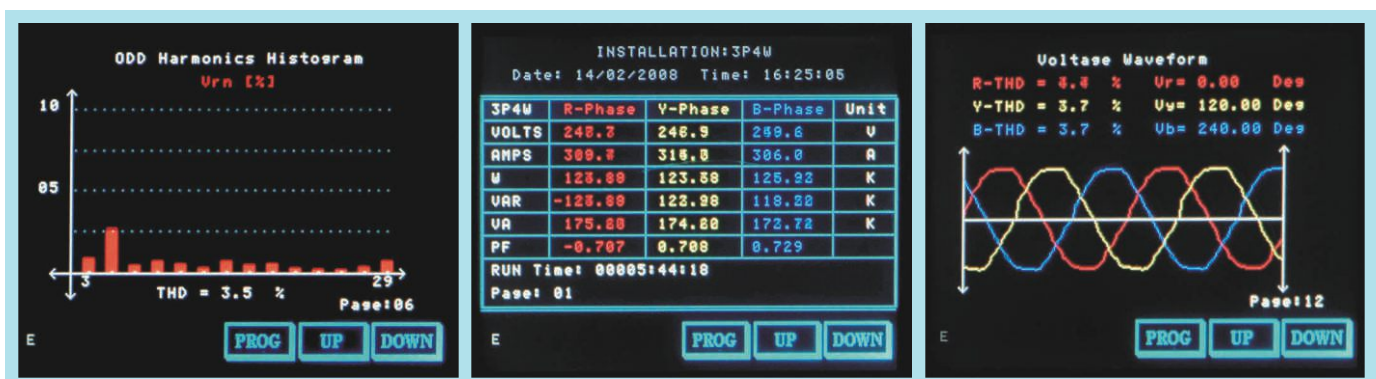
Technical Specifications :

Parameter			Statistics
Type	**Name**		**ORACLE**
True RMS Basic Parameters	Voltage (Volts L-N)	Direct Voltage Input	0 to 300V AC
		PT Ratio	Freely Programmable up to 220KV
		Range of Reading	0.0 to 220KV
		Accuracy	0.5% of Reading
	Voltage (Volts L-L)	Direct Voltage Input	0 to 510V AC
		PT Ratio	Freely Programmable up to 220KV
		Range of Reading	0.0 to 220KV
		Accuracy	1.0% of Reading
	Current (Amps Ir, Iy, Ib)	Secondary Current Input	2mA, 300mA, 1000mA
		CT Ratio	Freely Programmable up to 9999A
		Range of Reading	0.0 to 9999A
		Accuracy	0.25% of Reading
	Neutral Current	Accuracy	3% of Reading
	Line Frequency	Range of Reading	45 to 55 Hz
		Accuracy	0.3% of Reading
Power	Active Power (P)	Accuracy (Between 0.5 Lag to 0.8 Lead)	1.0% of Reading
	Reactive Power (Q)	Accuracy (Between 0.5 Lag to 0.8 Lead)	1.5% of Reading
	Apparent Power (S)	Accuracy	1.0% of Reading
	Power Factor	Accuracy	1% of Reading (IPFI>0.5)
		Range of Reading	0.05 to 1.00 Lag/Lead
Energy	Total Active Energy (KWh)	Range of Reading	0 to 314780.00 MWh
		Accuracy	1.0S as per IS13779
	Total Reactive Energy (KVARh)	Range of Reading	0 to 314780.00 MWh
		Accuracy(Between 0.5 Lag to 0.8 Lead)	1.5% of Reading
	Total Apparent Energy (KVAh)	Range of Reading	0 to 314780.00 MWh
		Accuracy	1.0% of Reading
Demand	Active Power (KW) Demand		Sliding & Fixed Selectable
	Apparent Power (KVA) Demand		
	Predictive Demand		Fixed Window
Power Quality	Harmonics for Voltages		3rd to 29th Odd Only
	Harmonics for Currents		3rd to 29th Odd Only
	THD for each Voltage		✓
	THD for each Current		✓
Misc.	Phase angles		✓
	Run time		✓

Input Specifications :

Supply: Three Phases and Neutral of a 3P4W system/ Three phases of a 3P3W system.

	ORACLE
Voltage:	
Direct Voltage Input	Up to 510V L-L and 300V L-N
PT Ratio	Freely Programmable up to 220KV Site selectable.
Range of Reading	1-220KV
Burden	0.5VA
Current:	
Secondary Current Input	5A or 1A
Range of Reading	0 – 9999A
Burden	< 1.0VA
Overload	5A CT = 6A RMS Continuous 1A CT = 5A RMS Continuous

Power Supply :

Self Power. Unit has in-built 3 phase supply with an operating range of 60 VAC - 480
VAC, 50-60 Hz. Mains supply (80-500 VAC) for connection at lab/office while downloadable data.

Data Logging :

Product Name	Records	Logging Interval	Total Duration	
			Min.	Max.
Oracle	30395	1 Sec. to 16.65 Min(999 Sec.)	8.4 Hours	351.4

Display   :   320X240 Color TFT

Dimensions   :   225(W) X 198(H) X 80 (D) mm.

Operating Temp.   : 10^0C to 50^0C.

Clamp-On CT Specification:
Current Transformer Ratios (Arms) : 600A/300mA, 5A/2mA (single range); 1A, 5A, 300mA (triple range)

For CTR-600A/300mA
Weight   :   0.36 kg.
Dimension   :   overall 183(L) X 96(W) X 60 (D) mm
Conductor size   :   96 mm
Burden Resistance   :   ≤ 2 ohms.
Accuracy   :   Class 0.5
Frequency Range   :   50 to 400 Hz.

*Specifications are subject to change without notice due to continuous improvement.