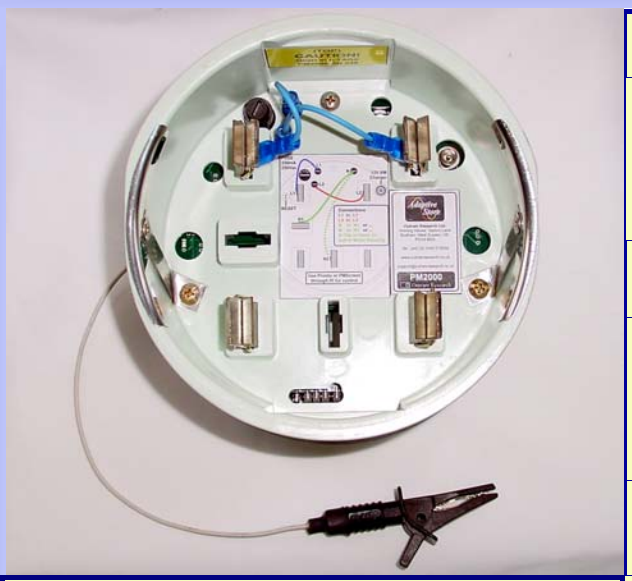
PM2000 Power Quality Meter Socket Logger

Synergy Systems



FEATURES

Patented Single Cycle Adaptive Storage
One Meg memory provides single cycle event resolution over recording periods of 30 days with all 16 channels recording - ***Standard***

Eight pre-stored configurations are set for split phase hook ups with several math channels pre–configured for power and harmonic measurements

FIVE externally visible status LEDs (4-bi-color)

Infrared Optically Isolated Noncontacting RS232, with MODBUS ASCII protocol

Rogowski coil technology ensures the most accurate current readings in a low current measurement situation

Accurate current readings to zero amps

Records and displays up to 16 channels of voltage, current, power, power factor, VAR's, phase angle, frequency, THD,and much more - ***Standard***

Data Storage includes an additional internal flash memory for field programmable upgrades

THD Harmonic Readouts on all voltage and current channels - ***Standard***

PM Screen software for virtual screen display, configuration, and operation (launched through Pronto for Windows)

Measures current in L1 and in L2

Battery back up provides 10 minutes resettable timed ride-through in case of power outage

Measures voltage L1 to neutral, L2 to neutral, and L1 to L2. - ***Standard***

Works with 4 – and 5 – Jaw Meters

Compact size Marwell socket case

SPECIFICATIONS

MODEL	PM2000
Input Voltage	Three 0-300 Vac True RMS
Input Current	Two 0-220 Amp Rogowski Type Rigid Coil Sensors
Channels	16
Accuracy	Voltage < 0.25% True RMS of Reading
Resolution	Fixed to 0.1 Vac and 0.1 Aac
Math Channels	***AC 1 Phase:*** RMS, Real Power, VARS (fund), Apparent Power, Power Factor, Phase angle, Frequency ***AC Split Phase:*** Real Power, VARS (fund), Apparent Power, Power Factor ***Harmonics:*** Total Harmonic Value, % Total Harmonic Distortion ***Other Math Option:*** Channel X * Constant, Channel X / Channel Y, Filtered Channel X, Internal Temperature, On Charge, Battery Volts
Recording	64 samples per cycle; ***Single Cycle*** True RMS response time; 16 bit simultaneously sampling all channels
Memory	1MB Ram - ***Standard***
Recording Mode and Rate	***Adaptive Store:*** ***Unique*** store management enables extended recording & ***Single Cycle*** resolution on significant signal changes
Data Retention	Back-up battery provides 2 month's retention @ 77ºF (25ºC)
Power	Requires 100-300 Vac from L1 to L2 voltage measurement or separate power supply Battery: 4 AA Ni-Cad battery pack
Communications	***Serial Ports:*** ***Infrared Optically Isolated, non-contacting*** RS232, (up to 115.2K baud) ***Protocol:*** MODBUS ASCII ***Computer Requirements for Pronto Software:*** Windows 9x, ME, NT, XP: 486DX66 or higher; 250MB hard drive: 16MB RAM
Case	Marwell Socket
Weight	2.6 lbs.
Operating Temp	-22º F (-30º C) to 149º F (65º C)

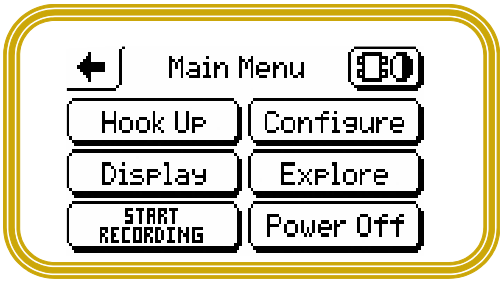
Each Unit Includes

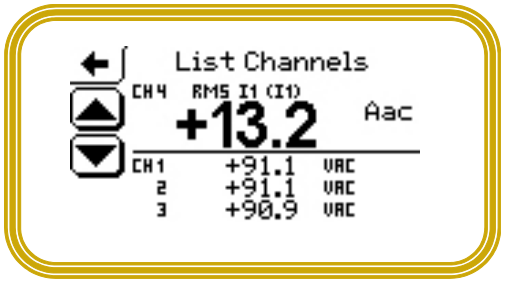
- *PM2000 Power Quality Meter Socket Logger*
- *Infrared Serial Download Cable*
- *12 Volt Charger*
- *Neutral Blade & Neutral Clip Lead*
- *LED Legend Card*
- *Pronto for Windows Analysis Software*
- *Operation Manual on CD*
- *Carrying Case*

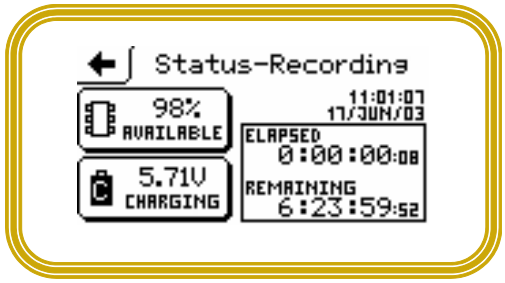
*Another **Adaptive Store** product from Outram Research, LTD*

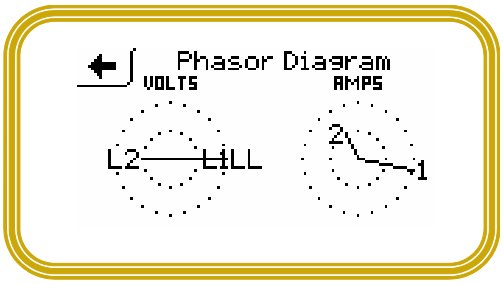
Free Product Training & Support Videos @ www.synergy-mi.com

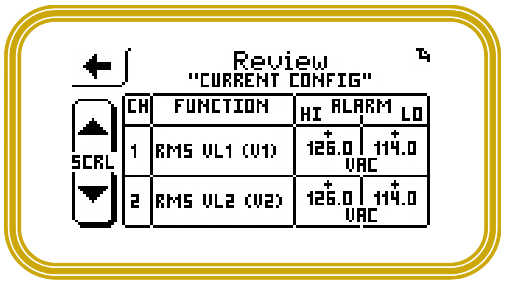
PM2000 Virtual Display Screen Examples

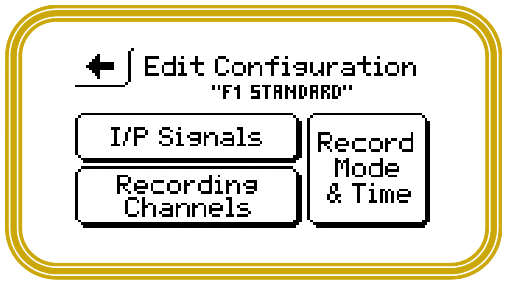


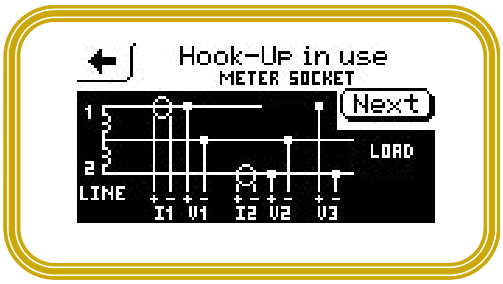


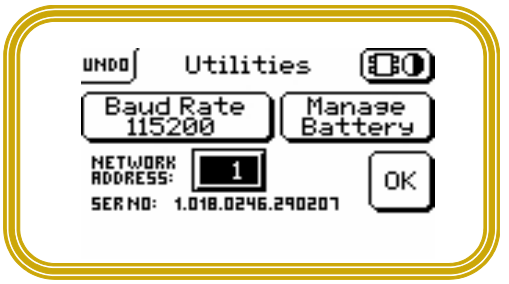




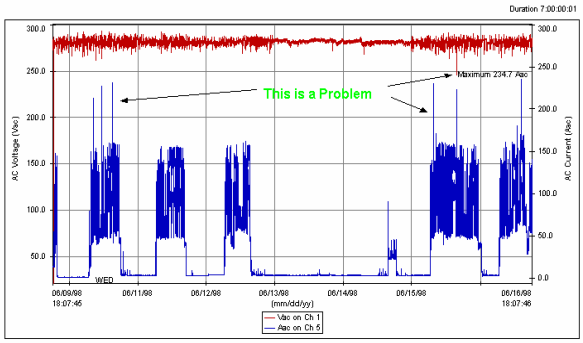








Pronto for Windows Data Analysis & Reporting Software



Vac on Ch 1 limits 289, 271

Exceedence Report for Vac on Ch 1 limits 289, 271
09/22/00

File Name: TRIAM3.PDB
Directory: E:\PRONTO4W\PROJECTS
Author: Frank Perri

Exception list: Vac on Ch 1 limits 289, 271
Created by: Frank Perri
Created on: 08/25/00 08:54
Start time; 06/09/98 18:07:45
End time: 06/16/98 18:07:46
Exceptions Found: 450
Test Mode: all data

Exceedences for Vac on Ch 1
Upper Limit: +289.0
Lower Limit: +271.0
Test For: Outside upper or lower limit

Start Time	End Time	Duration hh:mm:ss.000	Max/Min Vac	Exceedence Type
06/09/98 18:17:29	06/09/98 18:18:06	37.098	270.1	Minimum limit
06/09/98 18:18:21	06/09/98 18:18:22	0.735	269.3	Minimum limit
06/09/98 18:19:00	06/09/98 18:19:37	37.098	269.0	Minimum limit
06/09/98 18:19:46	06/09/98 18:19:48	1.134	269.0	Minimum limit

Functions

- ⇒ File Management Tools
- ⇒ Templates for Viewing Data
- ⇒ Unlimited Traces on Screen
- ⇒ Titles, Subtitles & Legends for Text & Data
- ⇒ Text Annotation
- ⇒ Arrow Pointer for Text
- ⇒ Cut & Paste Options
- ⇒ Font Selection of Size & Type Color Selection for Text & Graphs
- ⇒ User Information Screen
- ⇒ Modem Communications
- ⇒ Local Data Logger Network Support
- ⇒ Remote Data Logger Network Support
- ⇒ Notebook
- ⇒ Access to Word Processors
- ⇒ 38.4 K Baud up to 230.4 K Baud
- ⇒ Logger Configuration
- ⇒ **Zooming Tools**
  Frame
  Pan
  Exception Zooming
  Limits (value or %)
- ⇒ **Playback Tools**
  Manual
  Auto
  Scheduled
  Multiple/Groups
- ⇒ **Reporting Tools**
  Exceedence Reports
  Customer Statistics Tabular Listings
  Custom Reports
- ⇒ Network-Addressable Data Logger Access
- ⇒ Windows-Controlled Printer Support
- ⇒ Built-In Address Book
- ⇒ Context-Sensitive, On-Line Help System
- ⇒ Used with all Ranger & Adaptive Store Products

Represented By:

Synergy Systems

www.synergy-mi.com

Synergy Systems, Inc
4101 Pierce Drive
Shelby Township, MI 48316

Phone: 800-338-4505
248-656-2727
Fax: 248-656-6078
Email: sales@synergy-mi.com

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