



# POWER QUALITY ANALYZERS & DATA LOGGERS

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Volts, Amps, KW, VARS, PF, Phase Angle, Harmonics,  
Interharmonics, Flicker, Transients, and Waveform Capture



## Each Unit Includes:

- ✔ Five Fused Voltage probes 600V
- ✔ Four 24" 6000A/400.0A Flexible Current Clamps (other lengths available)
- ✔ Pronto for Windows Analysis Software
- ✔ Bluetooth Adapter for Laptop or PC
- ✔ 16GB Flash Drive for Expanded Memory
- ✔ 12 Volt Charger & Carrying Case
- ✔ 1 year warranty
- ✔ No cost lifetime upgrades for Software & Firmware

## Quick Specs

<b>Voltage Channels</b>	4 (0-600 VAC)
<b>Current Channels</b>	4 (2 ranges- 6000A or 400.0A)
<b>Recording Channels</b>	32 Detailed, >470 General Parameters
<b>Sample Rate</b>	PM7000S @ 320 Samples/cycle PM7000H @ 2,056 Samples/cycle PM7000T @ 20,480 Samples/cycle
<b>Memory storage for recorded data</b>	128MB, Expandable with External Flash Drive
<b>Communications</b>	Bluetooth, USB, USB Flashdrive, Ethernet, Remote
<b>Waveform Triggers</b>	Transient, Ring, Sag, Swell, RMS Fall, THD Current, THD Voltage
<b>Waveform Memory</b>	32 MB
<b>Power Requirements</b>	90-660 VRMS(V1), 12Vdc (DC Charger)

## Why you should consider a PM7000

- Records 32 Detail Channels simultaneously with single cycle resolution on changes, because of our Exclusive Patented **Single Cycle Adaptive Store**
- Auto-ranking of waveform capture greatest disturbances-Ranger exclusive
- Compliant to IEEE 1453 Flicker Specification. Only Ranger Loggers measure Instantaneous Flicker
- Input leads fusing is Standard
- High speed sampling on ALL inputs including 4 Currents and 4 Voltages
- Interharmonics Option
- 128 MB on board memory. Expandable memory though USB Flash Port that automatically writes to drive when recording finishes
- Wireless communications to remote PC or Android Device allows access to PM7000 display, without suiting up as required by NFPA 70



## Each Unit Includes:

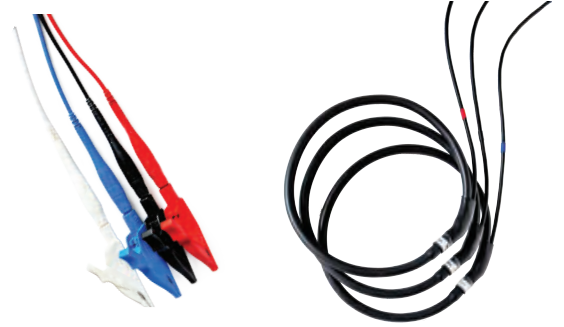
- ✔ Five Fused Voltage probes 600V
- ✔ Four 24" 6000A/400.0A Flexible Current Clamps (other lengths available)
- ✔ Pronto for Windows Analysis Software
- ✔ Bluetooth Adapter for Laptop or PC
- ✔ 16GB Flash Drive for Expanded Memory
- ✔ 12 Volt Charger & Carrying Case
- ✔ 1 year warranty
- ✔ No cost lifetime upgrades for Software & Firmware

## Quick Specs

Voltage Channels	4 (0-600 VAC)
Current Channels	4 (2 ranges- 6000A or 400.0A)
Recording Channels	32 Detailed
Sample Rate	320 Samples/cycle
Memory storage for recorded data	32MB, Expandable with External Flash Drive
Communications	Bluetooth, USB, USB Flashdrive, Ethernet, Remote
Waveform Triggers	Transient, Ring, Sag, Swell, RMS Fall, THD Current, THD Voltage
Waveform Memory	2 MB
Power Requirements	90-660 VRMS(V1), 12Vdc (DC Charger)

## Why you should consider a PM4000

- Records 32 Detail Channels simultaneously with single cycle resolution on changes, because of our Exclusive Patented **Single Cycle Adaptive Store**
- Auto-ranking of waveform capture greatest disturbances-Ranger exclusive
- Compliant to IEEE 1453 Flicker Specification. Only Ranger Loggers measure Instantaneous Flicker
- Input leads fusing is Standard
- High speed sampling on ALL inputs including 4 Currents and 4 Voltages
- Interharmonics Option
- 32 MB on board memory. Expandable memory though USB Flash Port that automatically writes to drive when recording finishes
- Wireless communications to remote PC or Android Device allows access to PM4000 display, without suiting up as required by NFPA 70



## Each Unit Includes:

- ✔ Four Fused Voltage Input Cables
- ✔ Three 24" 6000A/400.0A Flexible Current Clamps (other lengths available)
- ✔ Pronto for Windows Analysis Software
- ✔ 8 MB Memory and Bluetooth Capability
- ✔ 12 Volt Charger & Carrying Case
- ✔ 1 year warranty
- ✔ No cost lifetime upgrades for Software & Firmware

## Quick Specs

Voltage Channels	3 (0-525 VAC)
Current Channels	3 (3 ranges- 6000A/ 400.0A/50.00A)
Recording Channels	16 Detailed
Sample Rate	3,840 Samples/sec
Memory	8MB, 16MB, 32MB
Communications	Bluetooth, USB, Remote
Power Requirements	100-500 VAC from L1 to L2, 12Vdc (DC Charger)

## Why you should consider a PM3000

- Records 16 Detail Channels simultaneously with single cycle resolution on changes, because of our Exclusive Patented **Single Cycle Adaptive Store**
- Compliant to IEEE 1453 Flicker Specification. Only Ranger Loggers measure Instantaneous Flicker
- Optional DC Measurement
- Input leads fusing is Standard
- High speed sampling on ALL inputs including 3 Currents and 3 Voltages
- Wireless communications to remote PC or Android Device allows access to PM3000 display, without suiting up as required by NFPA 70
- Easy to use graphical touchscreen
- Records and displays harmonics: Odd, Even, Triplens, THD%, and individual harmonics (including harmonic direction) to the 15th
- 5 pre-stored configurations for quick set-up



## PM2000-300BT



### Each Unit Includes:

- ✔ Infrared USB Download Cable
- ✔ Neutral Blade and Neutral Clip Lead
- ✔ Pronto for Windows Analysis Software
- ✔ 1 MB Memory and Bluetooth Capability
- ✔ 12 Volt Charger & Carrying Case
- ✔ 1 year warranty
- ✔ No cost lifetime upgrades for Software & Firmware

### Quick Specs

Voltage Channels	5 (0-500 VAC)
Current Channels	2 (0-220A)
Recording Channels	16 Detailed
Sample Rate	3,840 Samples/sec
Memory	1 MB RAM
Communications	Bluetooth, Infrared, Remote
Power Requirements	50-525 VRMS (VI), 12Vdc (DC Charger)

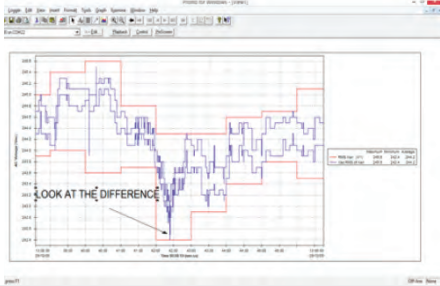
### Why you should consider a PM2000

- Records 16 Detail Channels simultaneously with single cycle resolution on changes, because of our Exclusive Patented **Single Cycle Adaptive Store**
- PM2000F-300BT version for socket class 320 (also compatible with socket class 200).
- Compliant to IEEE 1453 Flicker Specification. Only Ranger Loggers measure Instantaneous Flicker
- L1 to L2 is measured, not calculated
- Recording automatically starts after 1 minute of installation
- Pre-stored configurations for quick set-up

	PM7000	PM4000	PM3000HF	PM2000F	PM2000F-300	PM7000 FLM	PM7503
Voltage Channels	4 (0-600 VAC)	4 (0-600 VAC)	3 (0-525 VAC)	3 (0-300 VAC True RMS)	3 (0-300 VAC True RMS)	4 (0-600 VAC)	4 (0-600 VAC, 0-300 VDC)
Current Channels	4 (2 ranges- 6000A or 400.0A)	4 (2 ranges- 6000A or 400.0A)t	3 (2 ranges- 6000A or 400.0A)	2 (Two 0-220 Amp Rogowski Type Rigid Coil Sensors)	2 (Two 0-300 Amp Rogowski Type Rigid Coil Sensors)	4 (2 ranges- 6000A or 400.0A)	4 (0-1V RMS. Current to Voltage CT's supplied, nominal input 1A)
Detailed Recording Channels	32	32	16	16	16	32	32
General Parameters*1	✔					✔	✔
Sample Rate	PM7000S @ 320 Samples/cycle PM7000H @ 2,056 Samples/cycle PM7000T @ 20,480 Samples/cycle	320 Samples/cycle	3,840 Samples/sec	3,840 Samples/sec	3,840 Samples/sec	320 Samples/cycle	19.2k Samples/sec
Memory storage for recorded data	128MB	32MB	8MB, 16MB, 32MB	1MB	1MB	128MB	128MB
Expandable Memory with a memory Stick or Hard Drive	✔	✔				✔	✔
Flicker (Plt, Pst, Pinst, Pflag)	✔	✔	✔	✔	✔	✔	✔
Highest order of individual harmonics*2	50th (127th Optional)	50th	15th	N/A	N/A	50th (127th Optional)	50th (127th Optional)
Interharmonics	Optional					Optional	Optional
THD and THC	✔	✔	✔	✔	✔	✔	✔
kW	✔	✔	✔	✔	✔	✔	✔
KVA	✔	✔	✔	✔	✔	✔	✔
KVAR	✔	✔	✔	✔	✔	✔	✔
Power Factor	✔	✔	✔	✔	✔	✔	✔
Unbalance (V & I)	✔	✔	✔	✔	✔	✔	✔
Frequency 45-65Hz (can automatically detect 50 or 60Hz nominal)	✔	✔	✔	✔	✔	✔	✔
InRush Current	✔	✔	✔	✔	✔	✔	✔
K Factor	✔	✔				✔	✔
DC Measurement			Optional				✔
Symmetrical Components	✔	✔	✔			✔	✔
IEC6100-4-30	Measures to Class A or more accurate	Measures to Class A or more accurate	Class S			Measures to Class A or more accurate	Measures to Class A or more accurate



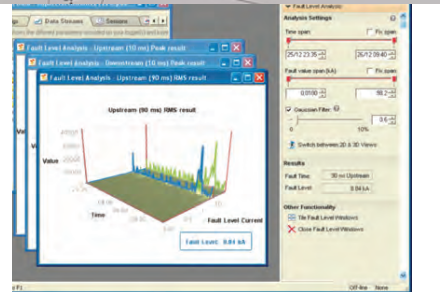
# ASK US ABOUT...



Pronto for Windows Software

Socket Adapter				
Model	SA204	SA304	SA215	SA315
Configurations	3 Phase 3 Wire		3 Phase 4 Wire	
Meter Form	2S, 12S		14S, 15S, 16S, 17S	
Voltage Rating	600 VAC			
Max Current	200 AAC	320 AAC	200 AAC	320 AAC
Current Range	0.5 to 200 AAC	0.5 to 280 AAC	0.5 to 200 AAC	0.5 to 280 AAC
CT Ratio	1000:1			
Accuracy	1% of Reading			

Meter Socket Interface



PM7000 Fault Level Monitor



5A Secondary Current Transformers (CTs) Monitoring



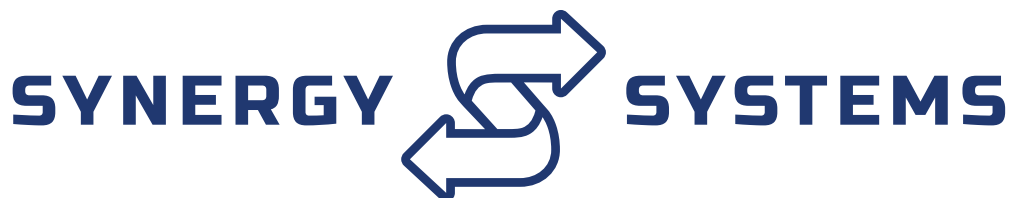
PM7503 Front View

PM7503 Panel Mount Power Quality Analyzer

## Still have questions?

Reach out to us by calling the number below so we can answer any questions you might have.

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