PM2000 POWER QUALITY METER SOCKET LOGGERS



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

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

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)



RANGER FULL SPEC SHEET COMPARISON

	РМ7000	PM4000	РМ3000НF	PM2000F	PM2000F-300	PM7000 FLM	РМ7503
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	\odot					\odot	\odot
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	\odot	\odot				\odot	\odot
Flicker (Plt, Pst, Pinst, Pflag)	\odot	\odot	\odot	\odot	\odot	\odot	\odot
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	\odot	\odot	\odot	\odot	\odot	\odot	\odot
kW	\odot	\odot	\odot	\odot	\odot	\odot	\odot
KVA	\odot	\odot	\odot	\odot	\odot	\odot	\odot
KVAR	\odot	\odot	\odot	\odot	\odot	\odot	\odot
Power Factor	\odot	\odot	\odot	\odot	\odot	\odot	\odot
Unbalance (V & I)	\odot	\odot	\odot	\odot	\odot	\odot	\odot
Frequency 45-65Hz (can automatically detect 50 or 60Hz nominal)	\odot	\odot	\odot	\odot	\odot	\odot	\odot
InRush Current	\odot	\odot	\odot	\odot	\odot	\odot	\odot
K Factor	\odot	\odot				\odot	\odot
DC Measurement			Optional				\odot
Symmetrical Components	\odot	\odot	\odot			\odot	\odot
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

	РМ7000	PM4000	РМЗОООНГ	PM2000F	PM2000F-300	PM7000 FLM	РМ7503
Single Cycle Adaptive Store	\odot	\odot	\odot	\odot	\odot	\odot	\odot
Time Interval Store	\odot	\odot	\odot	\odot	\odot	\odot	\odot
Sag / Swell / Outage Monitoring	\odot	\odot	\odot	\odot	\odot	\odot	\odot
High Speed Waveforms with AutoRanking Waveform Capture	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
Waveform Capture Memory	32MB	2MB	N/A	N/A	N/A	32MB	32MB
Transient detection	(both cycle & sub-cycle)	(both cycle & sub-cycle)	(down to single cycle)	(down to single cycle)	(down to single cycle)	(both cycle & sub-cycle)	(both cycle & sub-cycle)
CBEMA / ANSI / ITIC curve plots	\odot	\odot				\odot	\odot
Onboard Display			\odot				
Bluetooth	\odot	\odot	\odot	\odot	\odot	\odot	\odot
Ethernet	Optional	Optional				Optional	\odot
USB or Infra-Red Communication	USB	USB	USB	Infra-Red	Infra-Red	USB	USB
Remote screen with PMScreen	\odot	\odot	\odot	\odot	\odot	\odot	\odot
Remote Communications via PMGateway	\odot	\odot	\odot	\odot	\odot	\odot	\odot
Time Synchronization over mobile phone or PC	\odot	\odot				\odot	\odot
Baud Rate	Up to 921.6k	Up to 921.6k	115.2k	115.2k	115.2k	Up to 921.6k	Up to 921.6k
Power Requirements	Powered from V1 input (90-660 VRMS, 15W Max) OR from charger input @ 12Vdc, 6W Max.	Powered from V1 input (90-660 VRMS, 15W Max) OR from charger input @ 12Vdc, 6W Max.	Powered from V1 input (50-525 VRMS,) OR from charger input @ 12Vdc, 6W Max.	100-300 Vac from L1 to L2 voltage measurement or separate power supply	100-300 Vac from L1 to L2 voltage measurement or separate power supply	Powered from V1 input (90-660 VRMS, 15W Max) OR from charger input @ 12Vdc, 6W Max.	
Portable/Fixed	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	F
Dimension	9" x 7.5" x 4.3"	9" x 7.5" x 4.3"	8" x 6.5" x 3.5"	6.75" x 6.75" x 5"	6.75" x 6.75" x 6"	9" x 7.5" x 4.3"	11.3" x 8.1" x 2.8"
Weight	7.7lbs	7.7lbs	2.5lbs	2.6lbs	2.6lbs	7.7lbs	
Operating Temperature	-20 to 60°C	-20 to 60°C	-10 to 60°C	-30 to 65°C	-30 to 65°C	-20 to 60°C	-20 to 60°C
Accuracy	< 0.25% excluding sensors, +/- 2LSDs (in target ranges)	0.2%. 0.1% in reference range 20-30°C (excluding sensors). +/-2LSB.	Volts and wide range current < 0.25% True RMS Narrow range current < 1% True RMS	Voltage < 0.25% True RMS of Reading Current < 0.5% True RMS of Reading	Voltage < 0.25% True RMS of Reading Current < 0.5% True RMS of Reading	< 0.25% excluding sensors, +/- 2LSDs (in target ranges)	0.2%. 0.1% in reference range 20-30°C (excluding sensors). +/-2LSB.
Safety Rating	600V Cat IV, 1000V Cat III (Fuses removed)	600V Cat IV, 1000V Cat III (Fuses removed)	600V Cat III	600V Cat III	600V Cat III	600V Cat IV, 1000V Cat III (Fuses removed)	600V Cat III
IP Rating	IP65	IP65	IP51	N/A	N/A	IP65	IP40
Software	Pronto for Windows	Pronto for Windows	Pronto for Windows	Pronto for Windows	Pronto for Windows	Pronto for Windows	Pronto for Windows