SMG7000 Portable Three-Phase Electrical Tester

I. Introduction

SMG7000 is portable instrument for grid running quality detection and analysis. Can provide the harmonic analysis and power quality and other data analysis, and is equipped with a large-capacity memory , capable of long-term data collection and detection for the grid, equipped with PC software, uploads the collected data to a computer for easy kinds of analyzes.

II.Features

1.One special instrument of power quality analysis.
2.ARM and DSP and 16M bytes of memory
3.Touch screen, easy and convenient for operation.
4.Test and save data, upload to PC to analysis.
5.The modular structure, reasonable design, reliable operation.
6.You can use a USB drive to update the instrument software, software upgrades easy.
7.Use power quality data analysis software analyzes measurement data on the PC.

III. Parameters

Item	Measurement range	Measurement accuracy	Remark
Voltage/current/frequency	3 phase voltage: 10～700V(True RMS) 3 phase current: 0.5～1000A(True RMS, Optional 1000A current sensor) Neutral current: 0.5～10A(True RMS) frequency: 40～70Hz	Voltage: ±0.5% current: ±0.5% frequency: ±0.01Hz	The A-phase voltage and frequency as the measuring frequency
Harmonic measurement	Voltage harmonics: total harmonic +1～50 harmonic current harmonic: total harmonic +1～50 harmonic	Voltage harmonics: ±0.1(%f) current harmonic:±0.05(A)	
Power Measurement	Active power: 0.05~700KW	Active power: reading	

	apparent power: 0.05~700KVA reactive power: 0.05~700KVAR power factor: 0.00～1.00 Active energy: 0.01～10000kWh apparent energy: 0.01～10000kVAh reactive energy: 0.01～10000kVARh Average power factor: 0.00～1.00	±50W apparent power: reading±50VA reactive power: reading±50VAR power factor: reading±0.005 Active energy: reading±0.05kWh apparent energy: reading±0.1kVAh reactive energy: reading±0.1 kVARh Average power factor :reading±0.005	
Three phase imbalance	Fundamental voltage: 10～700V(True RMS) Fundamental current: 0.5～1000A(True RMS) Fundamental frequency: 40～70Hz phase angle: 0～360° imbalance: 0.0%～100%	Voltage: 0.5%; current: 0.5% frequency: reading±0.01Hz phase angle: reading±0.3° voltage imbalance：reading±0.2% current imbalance：reading±1%	The A-phase voltage and frequency as the measuring frequency
Monitoring records	Parameters can be recorded: 3 phase voltage, 3 phase current, zero phase current, voltage harmonics (total harmonic, 1-25 harmonic), current harmonic (total harmonic, 1-25 harmonic), 3 phase imbalance, active power, power factor, fluctuation, flicker	Same with the above related items	Time monitoring time max up to 960 hours.
Voltage sags and swells	Voltage sags and swells, temporary power failure		Can record up to 40
Fluctuation	Voltage fluctuation: 0.1%~10.0%	Error: ±5%	
Flicker	Short Flicker Long Flicker	Short flicker error: ±5%	
Digital oscilloscopes	Three-phase voltage , three phase current, zero line voltage and neutral current transient waveforms	Max sampling frequency: 200KHz Min sampling frequency: 100Hz	

IV. Accessories

Host

Test Wire

Clips

Communication Line

Current Clamp

Charger

Manual,Report,Certificate