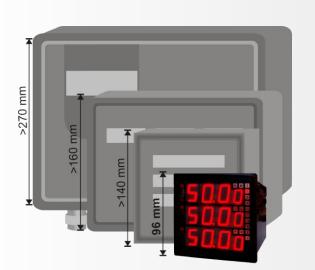
Power Quality Analyzer SHMK96

Overview

SHMK96 is a modern digital measurement instrument, providing accurate three-phase measurements of AC electrical quantities. It also enables power quality assessment according to present standards.

Areas of application

The Power Quality Analyzer SHMK96 is intended for continuous measurements of electrical power and power quality parameters in three-phase AC networks. It can be used to control the conformity of power quality with EN 50160 norms.



Measurements

- Power frequency
- Voltage and current magnitudes
- Flicker perceptibility
- Dips, swells, interruptions
- Voltage unbalance
- Voltage harmonics
- Voltage interharmonics
- Under- and overdeviation
- Relative phase angles
- Active, reactive, apparent powers
- Active and reactive energies

IEC 61000-4-30 Class A compliant



Features

Multifunctionality

Device measures harmonics, interharmonics, unbalance, flicker, active, reactive and apparent powers, phase angles of fundamental and harmonic components, etc.

High accuracy and standard compliance

Current and Voltage measurement accuracy 0.1%. All power quality measurements are made according to IEC 61000-4-30 ed.2 Class A. Harmonic and interharmonic components are measured according to IEC 61000-4-7 Class I. Flicker is measured according to IEC 61000-4-15 Class F3.

Ultra compact design (96 x 96 x 75 mm) enables fast and easy installation

Increased LED indicator height (25 mm) provides comfortable local meter readings.

Ethernet based synchronization (NTP or PTP IEEE 1588) requires no additional synchronization circuits and is accurate up to $\pm 1\mu s$.

Competitive price

compared to existing power quality instruments.



Tel.: +7.4852313884 Fax: +7.4852313891 www.ec-continuum.ru info@ec-continuum.ru

Power Quality Analyzer SHMK96

Dimensions (W x H x D) 96 x 96 x 75 mm 3.8 x 3.8 x 3.0 inch			
Temperature range (operating) -40+55 °C (-40+131 °F) Humidity 30 to 80% non-condensing IP class ANSI/IEC 60529 IP51 3 x AC inputs (650VAC max) 57.7/133/230VAC line-to-neutral 100/230/400VAC line-to-line 3 x AC inputs Current 5A secondary (10A RMS max) 1A secondary (2A RMS max) 1A secondary (2A RMS max) 1A secondary (2A RMS max) Display Remote HMI and Control HTTP (WEB interface) Communication Communication protocols EC 60870-5-104 (Ethernet) IEC 60870-5-101 (EIA RS-485) Synchronization NTP (RFC 5905) / PTP (IEEE-1588) Power Supply Voltage O264 VAC, 4763 Hz DC 130-370V Current and Voltage Power quality IEC 61000-4-30 : Class A Harmonics and Interharmonics Flicker IEC 61000-4-7 : Class I Flicker IEC 61000-4-15 : Class F3 Active Energy IEC 62053-22 : Class 0.2S	Physical	Dimensions (W x H x D)	
Humidity 30 to 80% non-condensing IP class ANSI/IEC 60529 IP51 3 x AC inputs (650VAC max) 57.7/133/230VAC line-to-neutral 100/230/400VAC line-to-line 3 x AC inputs 5 A secondary (10A RMS max) 1 A secondary (2A RMS max) 2 A Secondary (10A RMS max) 3 - row 4 - digit LED display or 2 QVGA 320x240 LCD color display 3 - row 4 - digit LED display or 2 QVGA 320x240 LCD color display 4 A Secondary (10A RMS max) 5 A Secondary (10A RMS max) 5 A Secondary (10A RMS max) 6 A Secondary (10A RMS max) 7 A Secondary (10A RMS max) 8 A Secondary (10A RMS max) 8 A Secondary (10A RMS max) 8 A Secondary (10A RMS max) 9 A Secondary (10A RMS max) 1 A Secondar		Weight	0.5 kg (1.10 lbs)
IP class	Enviromental	Temperature range (operating)	-40+55 °C (-40+131 °F)
Voltage		Humidity	30 to 80% non-condensing
Voltage 57.7/133/230VAC line-to-neutral 100/230/400VAC line-to-line 3 x AC inputs 5A secondary (10A RMS max) 1A secondary (2A RMS max) 1A secondary (2A RMS max) Communication ports Ethernet (10/100BASE-T or 100BASE-FX), RS-485 Display Remote HMI and Control HTTP (WEB interface) Communication protocols EC 60870-5-104 (Ethernet) IEC 60870-5-101 (EIA RS-485) Synchronization NTP (RFC 5905) / PTP (IEEE-1588) Power Supply Voltage 90264 VAC, 4763 Hz DC 130-370V Power quality Harmonics and Interharmonics IEC 61000-4-30 : Class A Harmonics and Interharmonics Flicker Active Energy IEC 62053-22 : Class 0.2S		IP class	ANSI/IEC 60529 IP51
Current 5A secondary (10A RMS max) 1A secondary (2A RMS max) 1A secondary (2A RMS max) Communication ports Ethernet (10/100BASE-T or 100BASE-FX), RS-485 Display Remote HMI and Control HTTP (WEB interface) Communications Communication protocols IEC 60870-5-104 (Ethernet) IEC 60870-5-101 (EIA RS-485) Synchronization NTP (RFC 5905) / PTP (IEEE-1588) Power Supply Voltage 90264 VAC, 4763 Hz DC 130-370V Current and Voltage Power quality Harmonics and Interharmonics IEC 61000-4-30: Class A Harmonics and Interharmonics Flicker IEC 61000-4-15: Class F3 Active Energy IEC 62053-22: Class 0.2S	Interfaces	Voltage	57.7/133/230VAC line-to-neutral
Communication ports Ethernet (10/100BASE-T or 100BASE-T or 100BASE-FX), RS-485 Display Remote HMI and Control Communications Communication protocols Synchronization Power Supply Current and Voltage Power quality Harmonics and Interharmonics Flicker Active Energy Ethernet (10/100BASE-T or 100BASE-T or 100BASE-T or 100BASE-T or 100BASE-T or 100BASE-T or 100BASE-T or 100BASE-TX), RS-485 S-row 4-digit LED display or QVGA 320x240 LCD color display HTTP (WEB interface) BEC 60870-5-104 (Ethernet) IEC 61000-4-7. Class I		Current	5A secondary (10A RMS max)
Remote HMI and Control HTTP (WEB interface)		Communication ports	
Communications Communication protocols IEC 60870-5-104 (Ethernet) IEC 60870-5-101 (EIA RS-485) Synchronization NTP (RFC 5905) / PTP (IEEE-1588) Power Supply Voltage 90264 VAC, 4763 Hz DC 130-370V Current and Voltage Power quality IEC 61000-4-30 : Class A Harmonics and Interharmonics Flicker IEC 61000-4-15 : Class F3 Active Energy IEC 62053-22 : Class 0.2S		Display	
Communication protocols IEC 60870-5-101 (EIA RS-485) Synchronization NTP (RFC 5905) / PTP (IEEE-1588) Power Supply Voltage 90264 VAC, 4763 Hz DC 130-370V Current and Voltage 0.1% Power quality IEC 61000-4-30 : Class A Harmonics and Interharmonics IEC 61000-4-7 : Class I Flicker IEC 61000-4-15 : Class F3 Active Energy IEC 62053-22 : Class 0.2S	Communications	Remote HMI and Control	HTTP (WEB interface)
Power Supply Voltage 90264 VAC, 4763 Hz DC 130-370V Current and Voltage 0.1% Power quality IEC 61000-4-30 : Class A Harmonics and Interharmonics IEC 61000-4-7 : Class I Flicker IEC 61000-4-15 : Class F3 Active Energy IEC 62053-22 : Class 0.2S		Communication protocols	· ·
Power Supply Current and Voltage Power quality Harmonics and Interharmonics Flicker Active Energy DC 130-370V DC 130-370V DC 130-370V IEC 61000-4-30 : Class A IEC 61000-4-7 : Class I IEC 61000-4-7 : Class F3 IEC 62053-22 : Class 0.2S		Synchronization	NTP (RFC 5905) / PTP (IEEE-1588)
Power quality IEC 61000-4-30 : Class A Harmonics and Interharmonics IEC 61000-4-7 : Class I Flicker IEC 61000-4-15 : Class F3 Active Energy IEC 62053-22 : Class 0.2S	Power Supply	Voltage	·
Harmonics and Interharmonics IEC 61000-4-7 : Class I Flicker IEC 61000-4-15 : Class F3 Active Energy IEC 62053-22 : Class 0.2S	Measurements	Current and Voltage	0.1%
Measurements Flicker IEC 61000-4-15 : Class F3 Active Energy IEC 62053-22 : Class 0.2S		Power quality	IEC 61000-4-30 : Class A
Flicker IEC 61000-4-15 : Class F3 Active Energy IEC 62053-22 : Class 0.2S		Harmonics and Interharmonics	IEC 61000-4-7 : Class I
		Flicker	IEC 61000-4-15 : Class F3
Reactive Energy IEC 62053-23 : Class 1		Active Energy	IEC 62053-22 : Class 0.2S
		Reactive Energy	IEC 62053-23 : Class 1



Tel.: +7.4852313884 www.ec-continuum.ru info@ec-continuum.ru

Fax: +7.4852313891