PKF ZIFROVYE PRIBORY
Octava-ElectronDesign
Group Company

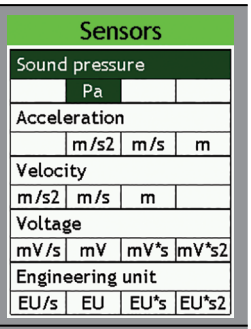
ECOPHYSIKA-110A (HF)

ECOPHYSIKA-110A-HF - new generation of multichannel sound and vibration analyzers.

NEW FEATURES

Sensor Manager handles the sensor catalog, sensor and calibrator cards, calibration settings

List of available transducers can be accessed in a measurement program



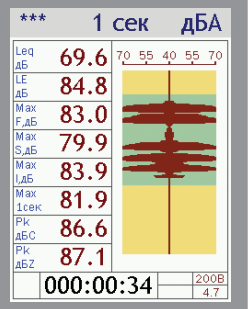
Level Range regulation extends measurement range for whole body and hand-arm vibration

Graphic time-history provides visual presentation of the process development in real time

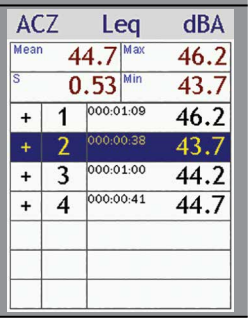
Multi-step Backerasing excludes damaged measurement data

Acoustic Calculator selects areas of interest in the time history and makes calculation for the selected areas only

Post-processing of auto-saved files may be done by the analyzer without an external PC



Repeated Measurement combines data of several manual measurements in a common file, and provides tools for statistics calculation

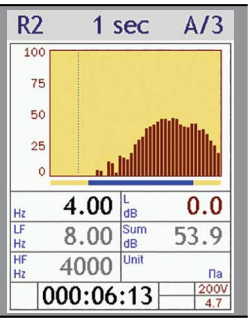


Notepad is a text logbook of measurements

4-channel 1/3-octave band analysis with frequency weightings

Derivative units (e.g., calculation of velocity or displacement spectra for acceleration transducers)

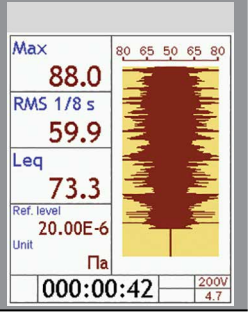
4-channel FFT analysis



Multichannel signal registrator mode

USB Audio

Real-time data transfer through the USB port without extra interface adapters



ECOPHYSIKA–110A–HF

FEATURES

Number of channels: 1-4
Direct connection of condenser microphones, IEPE transducers, EF and MF antennas (P6-71/P6-70)
Sound level measurements – class 1 sound level meter (GOST 17187-2010, IEC 61672-1)
Ultrasound measurement (up to 40 kHz or 100 kHz, depending on the frequency range of the microphone)
Infrasound measurement
Whole-Body and Hand-arm vibration measurement (GOST ISO 8041)
Simultaneous measurement of sound levels and three components of weighted acceleration (human vibration)
FFT analyzer, narrow band analyzer (selective voltmeter, up to 500 kHz)
Autostorage of measured data and/or signal digital time waveforms to the instrument memory
Post-processing of the recorded digital signals
4 GB non-volatile memory
Real time data transfer to external devices, remote control of the instrument
Display of the measurement results from external digital transducers
FFT analyzer, narrow band analyzer (selective voltmeter)

SETS OF FIRMWARE MEASUREMENT PROGRAMS

Engineering Acoustics WE-HF
1/3- octave analyzer MXYZ
1/12-octave analyzer MIC
uV-meter MIC
uV-meter HF
FFT analyzer MXYZ
Ultrasound 100 kHz
P6-70 WE-HF
P6-71 WE-HF

Sanitary Acoustics WE-HF
Ecosound WE-110A
Whole Body Vibration WE -HF
Hand-Arm Vibration WE -HF
SLM+HVM
Ultrasound 40kHz
P6-70 WE-HF
P6-71 WE-HF

Digital Transducers DIN
P3-81-01
P3-81-02
Ecosound -DIN
uV-meter -DIN
EcoLight-01-DIN
P3-80-E
P3-80-E300
P3-80-E400
P3-80-H300
P3-80-H400
EcoTerma-1-DIN
TTM-2-04-DIN
Whole Body Vibration -DIN
Hand-Arm Vibration -DIN

TECHNICAL SPECIFICATION

Standards	Sound level meter:	GOST 17187-2010, IEC 61672-1 (class 1)
	Human vibration meter:	GOST ISO 8041
	Spectrum analyzer:	GOST R 8.714-2010, IEC 61260 (class 1)
Sound level meter specification	Measurement level range, dB (A)	21 to 140*
	Frequency weightings	A, C, Z, AU, FI, G
	Time metrics	S, F, I, Peak, Leq
		** For sensitivity of 50 mV/Pa*
Vibration meter short specification	Measurement level range (Wk), dB re $1 \bullet 10^{-6}$ m/s^2	60 to 192**
	Frequency weightings	Wb, Wc Wd, We, Wj ,Wk, Wm, Wh, Fk, Fm, Fh
	Time metrics	RMS, MTVV, Peak, Leq, VDV
		*** For DH-4-E*
1/n-octave band analyzer	Octave band filters, Hz	1 - 16000
	1/3-octave band filters, Hz	0,8 - 100 000
	1/12-octave band filters, Hz	102,9 - 9716
Narrow band analyzer (FFT-4, uV-meter MIC, uV-meter HF)	Frequency Range, Hz	1 - 500 000
	Selective bandwidth, Hz	1; 1,5; 2,2; 3,3; 4,7; 6,8; 10; 15; 22; 33; 47; 68; 100 Гц (uV-meter MIC); 2; 4; 8; 16; 31; 62; 125; 250; 500; 1000 Гц (uV-meter HF)
	FFT lines displayed	200
	ZOOM	4 to 32
Accuracy of voltage RMS value measurement , %	2 Hz to 10 Hz	3
	10 Hz to 10 kHz	1,5
	10 kHz to 45 kHz	2
	45 kHz – 500 kHz (HF mode)	5
Power		4 x LR6 type batteries (AA size) or external source through USB port
Weight, kg		0,55
Size (L x D x H), mm,		176 x 86 x 35
Interfaces	Display	TFT, color, 320 x 240
	D-OUT	galvanic isolated UART
	D-IN	Input for digital transducers
	USB	

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