EXAMINATION AND SAFE OPERATION OF PRESSURE VESSELS, PIPELINES AND DANGEROUS INDUSTRIAL OBJECTS

## ACOUSTIC-EMISSION MEASURING DEVICES FOR NON-DESTRUCTIVE TESTING AND ENGINEERING DIAGNOSTICS

# SENSOPHONE AED-400 FAMILY

Several industrial designs taking into account the purpose, object and circumstances of the test
Connecting devices together, the number of acoustic-emission (AE) channels can be increased
Execution and evaluation of the measurement, preparing reports with connected PC

Special devices for individual testing and in-service monitoring

- 3-color LED display of the state and activities of AE channels
- Analogue voltage inputs for measuring the load parameters

Supply from mains, uninterrupted mains or battery

Wide range of accessories and attachments

Up-to-date microelectronic components

High reliability, low power consumption
Aesthetic and ergonomic design







### The SENSOPHONE AED-400

acoustic-emission product family is developed, produced and sold by Geréb and Co. Ltd.

based on their three decade-long experience in the field of acoustic-emission measuring, engineering and instrumentation development

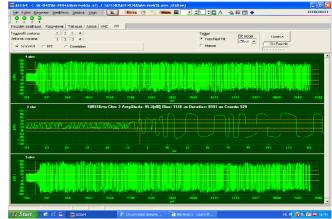
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"BE SURE OF SAFETY"

#### MAIN TECHNICAL CHARACTERISTICS

	AED-404	AED-416	AED-432
Number of AE channels	4	16	32
Measurement of all standard AE parameters	yes	yes	yes
Programmable digital filter on all AE inputs	30 kHz 1 MHz	30 kHz 1 MHz	30 kHz 1 MHz
Location on plain, cylinder, sphere surfaces	yes	yes	yes
Burst waveform recording on all AE channels	8 ms	8 ms	8 ms
Continuous waveform recording on AE channels	yes	ľ	-
Signal form and spectrum analysis	yes	yes	yes
Correlation calculations	yes	yes	yes
Phased linking of similar devices	yes	yes	yes
PC interface	USB, Ethernet	USB, Ethernet, wireless	
External powering	12 B / 0,25 A	12 B / 1,0 A	12 B / 2,0 A
Powering via interface	USB	Ethernet (PoE)	
Size	119x113x35 mm	126x213x77 mm	380x270x167 mm
Weight	320 g	1300 g	7000 g

- Control computer notebook, linked to the device via USB, Ethernet, PowerLine, wireless (WiFi, GSM)
- Powering from a wall adapter or battery, as well as via USB or Ethernet interfaces
- Rising the number of AE channels by linking similar devices to a common synchronised system (up to 128 channels)
- Possibility to go closer to the inspected object
- Minimum of cable connections
- Programmable linear or logarithmic amplifying mode
- Programmable test mode (pulser) on all AE channels
- Analog input lines for load control
- Digital input/output lines for technology process control
- Small size and weight, easy carrying



BUILT-IN NEW HARDWARE POSSIBILITIES:			
PC interfaces: USB, Ethernet, GSM, WiFi	Automatic setting of fixed/flying thresholds		
Phasing linked devices by GPS	individually for all AE channels		
Digital filters on all AE channels	Detecting and signalizing of cut-off and short-circuit		
Waveform recording on all AE channels	at the preamplifier cables		
All channels' hit data arrangement on Hit Time	RGB signalizing of AE channels' state		

#### SOFTWARE FEATURES AND HIGHLIGHTS

Complex support for arrangements, fulfilment and	Location: linear or on plain, cylinder, sphere surfaces	
evaluation of AE inspection	Import of the inspected object's drawing	
Continuous monitoring or single / periodic inspection	2D and 3D grafic evaluation of inspection's data	
mode	2D and 3D graphic representation of source locations	
Real-time and multiple off-line evaluation	Automatic protocol compilation	
Test modes: cabling and sensor placing check	🖙 AED64—C:MED40MED404AWérésekka.adj, C:MED40UAD404AWérésekka.mes (Online) 🔹 🕞 🔀 Elle Fyritz Megieterit Bestilliste, élőtekek Szöz 🔖 Minis 🕐 🔅 Minis 🧮 🛫 💠 🗘 🔯 🗮 🔶	
Automatic determination of the sound's local velocities,		
attenuation and running time	Kérzőlék beállitáski, Függrények   Téképek   Adaski, VNC   del	
Computing secondary AE parameters	Jeforma csatoma 1 2 3 4 C From Next Hit 32 us	
Signal form and spectrum analysis	C Snaphot C FFT C Correlation L 2 ■ R 4 ■ [[p]]	
Correlation calculations between any two channels	-61 µs 36.264- 27.764	
Configuring logical filters for AE Hits and Events	2 (1984- 2 6 884- 2 1 884- 2 1 884-	
Configuring logical conditions for issuing warning and	14.5504	
alarm signal (only at on-line)		
Linear transformation of load parameters		
Configuration data is saved in adjustment file		

#### ACCESSORIES

AE sensors with or without built-in preamplifier	Hsu-Nielsen source for testing
Magnetic hold-down for sensors	Universal power supply
Coaxial cables with or without built-in preamplifier	USB / Ethernet cable
Bobbins for long cables	Carrying case

IN SEVERAL CASES THE AE EXAMINATION CAN BE EXECUTED DURING OPERATION, WITHOUT DISTURBING THE TECHNOLOGY!