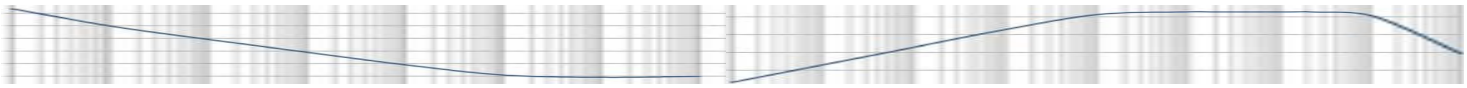
LEMI-419E

Long period telluric instrument – 8 channels

KMS Technologies
Innovating Solutions

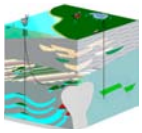


Long period

Product description

LEMI-152 magnetometer 0.00025 – 10,000 Hz frequency range

The Long-Period Telluric Instrument LEMI-419E is for electric field telluric measurements – signals with frequency from DC to 100 Hz with very high sensitivity and low drift. The measurements and recording can be done in automatic mode of natural and controlled source electric field variations and also visualization at external PC display of 8 electric channels (E_1 – E_8). A filter-free technology is used in input stages (it means “without high-pass filters”) to allow registration of super-long period signals. Automatic compensation circuits independent for every electric channel are implemented in the TSE to avoid the channels saturation in case of too high DC input voltage. Very low noise LEMI-701 electrodes are recommended (at the photo, right), but any other electrode types may be used.



LEMI-419E components

Product applications

Target applications are low frequency measurements for mining industry and crustal application as well as geothermal industry.

The system is made for low power field recording.

KMS Technologies

KJT Enterprises Inc.

Product specifications

Number of electric channels:	8
Frequency band:	DC...100 Hz
Measured ranges of electric signal (for each component)	±10, ±1, ±0.1V
Automated offset compensation range	±5000 mV
Resolution of electric meter	0.1 μV
Noise of electric meter at the frequency 1 Hz	<0.3 μV rms
Electric meter input impedance	>100 MOhm
Sample rate:	500 per s
ADC resolution	24 bits
Digital output interface (UART 921.6kb/sec)	RS-422
GPS timing, geographical coordinates and altitude determination	
GPS timing error	<10 μsec
Operating temperature range	Minus 20 to +50°C