

## Transient Electromagnetic Instrument

### Product Overview :

**GEOTEM-2 Transient Electromagnetic Instrument** utilizes an ungrounded loop line to send a pulse magnetic field underground. During the interval of the pulse magnetic field, it observes the change of the secondary eddy current field over time to obtain geological structure information data. The instrument can perform detection work on exposed bedrock, cement ground, deserts and permafrost, effectively exploring and accurately dividing geological structures and hidden structures. It is widely used in various fields such as geology and mineral resources, petroleum, water conservancy, power, railways, transportation, non-ferrous metals, and national defense engineering.



### Feature :

- (1) Sending power : 1~20A
- (2) Working frequency : 0.25Hz、 0.83Hz 、 2.5Hz 、 8.3Hz、 25Hz 、 75Hz、 225Hz
- (3) Number of observation channels : 40
- (4) Receive and transmit in one unit, compact and lightweight, low power consumption.
- (5) Segmented programmable amplification and high signal-to-noise ratio.
- (6) Real time display of current and historical quadratic field curves.

## Wide Field Electromagnetic Instrument



Launch System



Receiving System

### Product Overview :

**JSGY-2 Wide Field Electromagnetic Instrument** is a high-power artificial source electromagnetic instrument based on China's first "Pseudo-Random Signal Electric method" and "Wide Field Electromagnetic method". The instrument simultaneously sends and receives multiple step wave signals of different frequencies, and iteratively calculates the correct apparent resistivity in a wide area, breaking through the limitations of the traditional artificial sources in the "far zone", with an effective exploration depth of up to 8000 meters. It is widely used in the fields of deep oil and gas reservoir, shale gas, dry hot rocks, coalbed methane, goal areas of coal fields, metal mines, and water resource exploration and other fields.

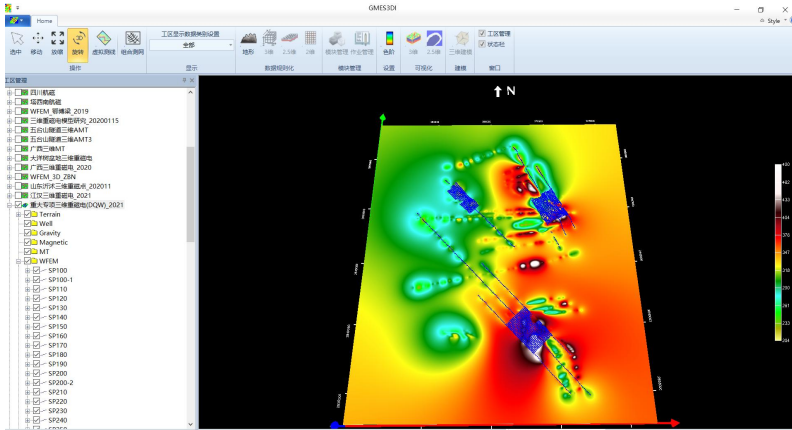
### Feature :

- (1) Sending power : 1500V/180A
- (2) Working frequency : 0.0034~9600Hz (404 frequency points)
- (3) Receiving channels : 8
- (4) Intelligent, open, multi-method, ultra-high power electromagnetic method sending platform.
- (5) Correct apparent resistivity over a wide area by measuring only a single component of the electric field one component electric field.
- (6) Effective exploration depth up to 8,000m.

# Platform for Integrated Interpretation of Geological and Geophysical Information

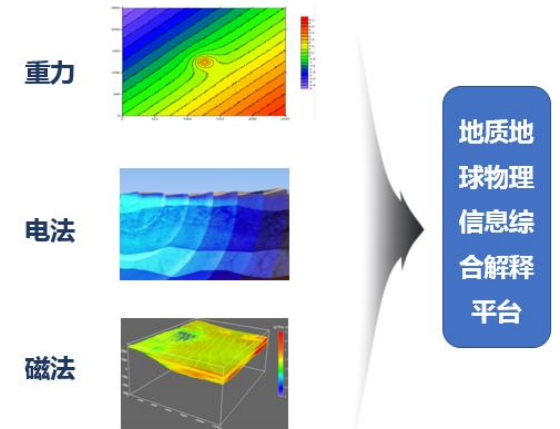
## Product Overview :

**Platform for Integrated Interpretation of Geological and Geophysical Information** has fully realized the 2D and 3D inversion imaging of gravity, magnetic and electric data, and formed a brand-new interpretation mode from inversion imaging to quantitative interpretation of gravity, magnetic and electric data. The organic integration of 2D and 3D inversion imaging and human-computer interaction positive inversion interpretation function provides a good platform for processing interpreters to give full play to their knowledge, experience, wisdom and judgment, which is conducive to improving the reliability and accuracy of interpretation results.

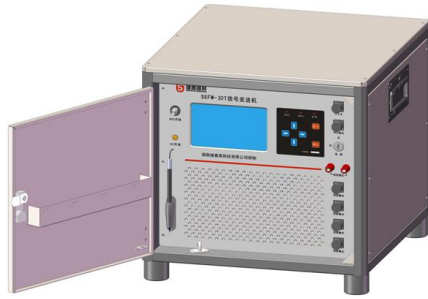


## Include :

- (1) Gravity prospecting data processing and imaging subsystems.
- (2) Magnetic prospecting data processing and imaging subsystems.
- (3) Electromagnetic prospecting data processing and imaging subsystems.
- (4) Model-based constrained imaging subsystem for gravity data.
- (5) Model-based constrained imaging subsystem for magnetic data.
- (6) Model-based constrained imaging subsystem for electromagnetic data.
- (7) Gravity, magnetic, electrical 2D human-computer interaction forward and inverse interpretation subsystems.
- (8) Gravity, magnetic, electrical 3D human-computer interaction forward and inverse interpretation subsystems.
- (9) Integrated information modeling and gravity, magnetic, and electrical 3D numerical simulation and analysis subsystems.



# Hydraulic Fracturing Electromagnetic Monitoring System



Launch System



Receiving System

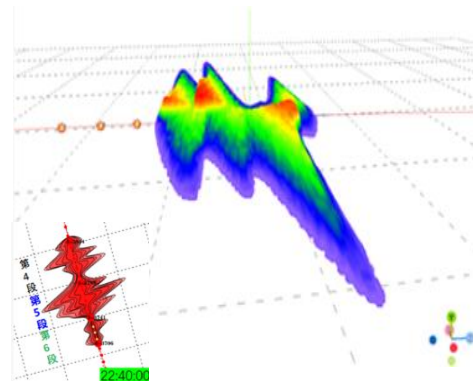


## Product Overview :

**Hydraulic Fracturing Electromagnetic Monitoring System** is based on China's first "Pseudo-Random Signal Electric method", which is completely different from seismic fracture monitoring and is an emerging electromagnetic fracture monitoring technology and equipment. By extracting the time-domain differential anomalies caused by fracturing, calculating the range of fracturing fluid and parameters such as crack morphology, and comprehensively analyzing monitoring results, evaluating the effectiveness of fracturing transformation, evaluating geological factors affecting crack extension, guiding the optimization of fracturing construction parameters, and help to solve difficulties in reservoir transformation and development.

## Feature :

- (1) Sending power : 200V/20A or 200V/30A
- (2) Receiving channels : 48 or 72
- (3) Communication : Mobile Network
- (4) Result update rate : < 10min
- (5) Effective exploration depth up to 8,000m.



Cloud Platform for Monitoring and Interpretation