

## SPECIFICATIONS

### GENERAL

Real-time and stable.....24\*7\*365 operation time of the automatic monitoring system.  
Data storage..... All the result data are stored in SQL database,webUI and data process program transfer data via database  
Customizable.....Support many monitoring sensors,support assemble the third part sensos an WebUI function customized  
Report export and alert setting..... Support history data report export, support mutiple alert methods and different value alert settings  
User management..... support create sub users, and configure sub users with different authority

### SENSOR SUPPORT

GNSS Sensors..... S9,S10,S10mini,Displacement Stack  
Geotechnical sensors..... extensometers, piezometers, strain gauges, inclinometers, thermometers, barometers, rain gauges, etc.  
Environmental sensors..... Meteo , rain gauge, water leve, etc  
Webcam images..... Store webcam images or send them to web UI

### COMMUNICATION

Multiple connection possibilities..... LAN, WLAN, Radio, cable/serial, mobile (GPRS/UMTS)

### FEATURES

Event management..... Notify relevant personnel of warning information by remote network,sound light,SMS, email.  
Data Analysis..... Real-time analysis of the solution results can be achieved, and historical data of the database can also be used for historical statistical analysis.  
Data push to SMOS webUI..... View and analyse data locally or in the cloud using range of graphs, images, maps, tables and deformation scans.

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**SOUTH SMOS**  
-Powerful Reliable Customizable-



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## SMOS-Automatic monitoring system

After more than ten years, SOUTH SMOS has formed two major business segments: geological disaster monitoring and structural health monitoring. More than 500 projects have been designed and implemented. It has become an vital member in a wide range of monitoring challenges.

### System



SMOS supports connection with third-party monitoring sensors or software. Diverse communication options allow seamless connectivity, sensor control, and real-time data storage and analysis. Automated data flow using many open interface standards enables simple and powerful sensor fusion. SMOS can ensure full-day measurement cycle with sensor scheduling and all important data can be stored in one SQL database.

### Software

By cleaning and filtering abnormal and incorrect data, the data reliability of various sensors can be ensured accurately and reliably, and then data adjustment, data mutual calibration, data quality inspection and other processing can be completed. If the alarm value of the monitoring system is active, the person in charge will be notified in time through various messaging options (email, SMS, alert). The system uses more than a dozen different sensors to realize all-weather automatic and high-precision monitoring and has a wide range of applications.



### Intelligent



SMOS services are powerful, versatile, and highly customizable, and can be installed locally or used in the cloud, giving you access to results anytime, anywhere. Use the intelligence of the software to realize the real-time control of each monitoring equipment, realize the automatic collection and processing of massive data, and facilitate data storage and query. The software is intelligent, the interface is friendly, the operation is simple.

## SMOS Software

The SMOS software consists of core SMOS Monitor programs that are compatible with other hardware and software, allowing users to select and combine modules to create packages that best suit their project needs.

### SMOS MONITOR

- Core part of the SMOS for data acquisition and multi-sensor control
- 24\*7\*365 operation time of the automatic monitoring system
- Real-time event management, action and messaging

### SMOS WebUI

- Intuitive and easy configuration of graphs, images, maps, tables Manage, analyse and distribute key information in one simple setup
- Access the service through ( PC, tablet, smart phone ) anywhere, anytime



## SMOS solution

SMOS is an extensible and customizable solution for a wide variety of monitoring applications.



Online Geological Hazard Monitoring



Reservoir Dam Monitoring



Slope Monitoring



Tailings Pond Monitoring



Transmission Tower Monitoring



Bridge Monitoring

## Key features

### Versatile

SMOS meets the needs of any monitoring project –big or small, temporary or permanent. It is a central unit for data acquisition, processing and alerting of applications such as environmental and climate change, construction, natural resources or energy management monitoring.



### Automatic

It supports a variety of communication options, sensor control as well as planning and real-time data storage and analysis. Automated data streams using many open interface standards enable simple, yet powerful sensor fusion and allow for comprehensive situation analysis. Accurate and reliable data are obtained through anomaly detection, data validation, filtering and automatic re-measurement.



### Sophisticated

Combining observations from different sensors ensures the stability and accuracy of your results. Customizable system status and critical observation limit checks will be notified immediately to the responsible person. Use messaging options (such as E-mail or SMS) to inform people of changes in deformation.

