

SPECIFICATIONS		
Robotic total station	Accuracy	Angle: 0.5"/1" Distance: 1+1ppm
	Operate System	Android 9.0, 32+3GRAM, Qua, Quad Core CPU
	Image	5 Megapixel wide angle camera Completely free for target aiming
	Display Unit	6.0 inch, full color, touch screen
Protective cover	Voltage	DC12V
	Communication	RS485
	Temperature and humidity	-25-75°C&<90%RH
	External dimensions	Φ530mm*588mm
	Rated power	6W
	Protection level	IP54
	Weight	12kg
Communication module I-control	Packing size	535mm*535mm*200mm
	Communication	2G/3G/4G, IoT card
	Voltage	DC12V-15V
	Environment	-25°C-75°C
	Storage temperature	-40°C-85°C
	Port Rs232	Quick connection socket, supporting the baud rate 1200, 2400, 4800,9600,19200,38400,57600, 115200 (BPS) (9600 is the default baud rate)
FMOS	Port RS485	Quick connection socket with 9600 baud rate (bps)
	External dimensions	160mm*106mm*48mm
		The software can control the instrument for bubble inspection, indicate laser switching, instrument rotation control, station setting, orientation and other operations



- Remote control, 24x7 operation
- Modular combinations, flexible configurations, and high scalability
- Intelligent Error Analysis and Early Warning
- Automatically generate data reports to improve efficiency
- Supports cloud deployment, data sharing and assisted decision making

Introduction

FMOS provides automated safety monitoring of subways, tailing ponds, dams, slopes, bridges, etc. It analyses the health status of the monitored body displacements, detects irregularities and provides warnings in time, evaluates the reliability of the structure, and provides a data basis for the management and maintenance of the monitoring works of the tailing ponds, dams, slopes, bridges and other monitoring works.

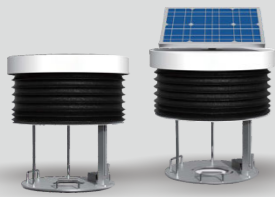


Composition



Robotic Total Station

Robotic total stations are one of the types of acquisition tools that FMOS can access to tackle demanding monitoring, railway, mining and tunnelling applications with optimum speed, accuracy and reliability.



Total Station Protective Cover

Lifting total station protective cover protects the total station from wind, rain, sun and dust in complex field environments, reducing the aging speed and damage to the equipment. The protective cover can also choose solar power supply, forming a self-powered all-in-one total station workstation.



Communication Module

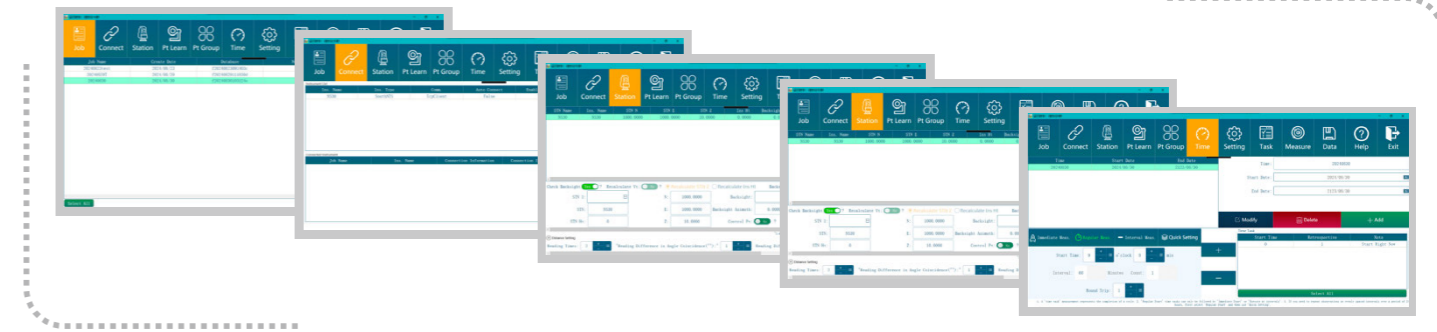
iControl-T is a remote IoT measurement and control device that combines power supply, communication, data acquisition and data storage functions. The module can be used for offline monitoring and supports triggered warnings as well as remote inspection and maintenance of monitoring equipment. The module supports data acquisition of total station, GNSS, water level meter, rebar meter, axial force meter, crack meter, static level, thermometer, inclinometer, rain gauge, etc. It is applied to sensor data acquisition and control of intelligent monitoring system.



Software

FMOS Intelligent Monitoring Software is a professional automated displacement monitoring system software, the software can be used with various brands of automatic measuring total station to form a real fully automatic monitoring system, automatic learning, automatic measurement, automatic processing and remote maintenance.

Software



- ▶ You can control the monitoring status in real time through PC or mobile phone in any place where you can access the Internet, and instruct the next step and determine the solution at any time and any place.

- ▶ Real-time data checking and display, to facilitate manual checking, data quality is more secure.

- ▶ Support learning point batch recalculation, multi-cycle mean value for the base cycle, cumulative changes in the amount of inheritance and other professional functions.

- ▶ The software has the functions of stability analysis of reference point, data analysis and complete monitoring log.

- ▶ Support two-dimensional and three-dimensional graphical analysis, intuitively view the changes in the monitoring point.

- ▶ The software has a platform docking interface, which can be docked to various regulatory platforms.

Applications



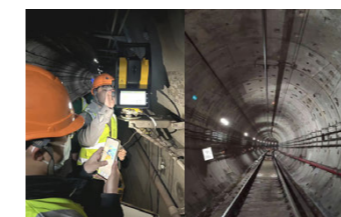
Dam Monitoring

The system adopts the 'trigger' monitoring technology, a variety of sensors can be triggered each other to form a monitoring network, which provides an important guarantee for water conservancy safety, and can be widely used in large, medium and small reservoirs for safety monitoring.



Pit Monitoring

The automatic monitoring system conducts real-time uninterrupted monitoring of the pit construction site, reducing the labour cost of pit monitoring and lowering the construction risk of pit monitoring. At the same time, it seamlessly connects with regional underground engineering risk supervision platforms to realise monitoring and management in the region.



Tunnel Monitoring

Narrow and long condition, with many prisms existed in small angle difference. Environmental factors such as dust, humidity, should be considered.



Slope Monitoring

The difficulty of slope monitoring is the long distance and large span, the distance between the measuring station and the slope surface is easily more than 400 metres, the robotic total station's ultra-long illumination range and accurate illumination accuracy can effectively deal with this test.