KQ GEO Technologies

Introduction

Established in May 2001 in economic and technological development zone in Beijing, now KQ GEO, as a high–tech private enterprise, has developed into 3S fields containing both software and hardware coving surveying and mapping, GIS services.

As Beijing enterprise technology center, KQ GEO also wins more than 10 kinds of honors such as the Advanced High Technology Enterprise, grade A Qualification of Surveying and Mapping, Double Software Certification, Computer System Integration. Till now, KQ GEO is already with over 800 employees, and owns more than 200 million RMB fixed assets.

KQ GEO has several offices in different districts in Beijing, such as Zhongguancun, Economic and Technological Development Zone, Daxing, Huairou, Tongzhou, etc. Besides, KQ GEO has invested 120 million to build the "KQ GEO Building" covering 14000 square meters in Economic and Technological Development Zone in Beijing, which is already completed. In addition, there are about 31 branched in different cities in China, 4 researching and developing centers in Beijing, Wuhan, Ji'nan, and Hefei, and over 20 oversea distributors abroad.
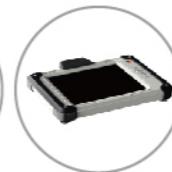
Dealers

M8	K8	N8	T80	L8

KQ GEO Instruments Co., LTD.

Add: 4th floor, E1 Building, Optical Valley Software Park, Hongshan District, Wuhan, China.
Tel: +86–27–87503759 Fax: +86–27–87503755 Email: simon.yao@kqgeo.com

M8 SERIES

M8 Smart RTK, New Power

· BD970 motherboard
· GPS+GLONASS+BEIDOU
· LINUX system
· 8G memory
· U Disc extension
· Automatically firmware updating
· Multi–function keys
· Internal bluetooth
· Internal GSM modem
· Full spectrum UHF
· Powerful 35W external radio
· Support self–built NTRIP server
· Audio guide
· Professional GIS collector

KQ GEO Technologies

WWW.KQGEO.COM

M8 Intelligent RTK
New trend of surveying

Support all satellites systems

Modular Design

Intelligent system

Transmitting – receiving radio

Simultaneous GSM and radio working mode

Mass storage

GSM/CDMA

USB Extension

Professional GIS collecting software
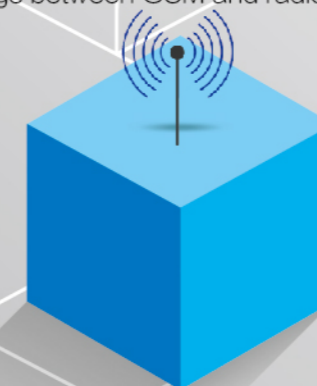
Industry application software

■ **Intelligent LINUX system**

Integrated with the advanced LINUX system and audio guidance, with mass storage, M8 offers users rich functions by very easy and friendly operations as well as good self-error correcting capability.

■ **Support all satellites system, including BDS**

Surveying GNSS antenna, support GPS, GLONASS and BDS

■ **Simultaneous GSM and radio working mode**

M8 base receiver support transmitting differential data in GSM mode and radio working mode simultaneously, perfectly satisfying flexible rover working mode changs between GSM and radio

LINUX LINUX

■ **410MHz~470MHz radio**

Built-in transmitting-receiving UHF, 0.5W/2W adjustable.

■ **Support U disc storage extension**

Support U disc storage extension up to 64GB, support hot plug, preventing data loss

■ **M8 Intelligent RTK**

Surveying GNSS Antenna
Good and stable performance in tracking satellites and positioning, especially in harsh environment

Built-in transmitting-receiving UHF
Built-in 2W transmitting-receiving UHF, enabling long distance work range by cooperation with 35W external radio

Mass storage
Internal 8G memory, while support U disc extension up to 64G

Simultaneous GSM and Radio transmitting
M8 base receiver support transmitting differential data in GSM mode and radio working mode simultaneously, perfectly satisfying flexible rover working mode changs between GSM and radio
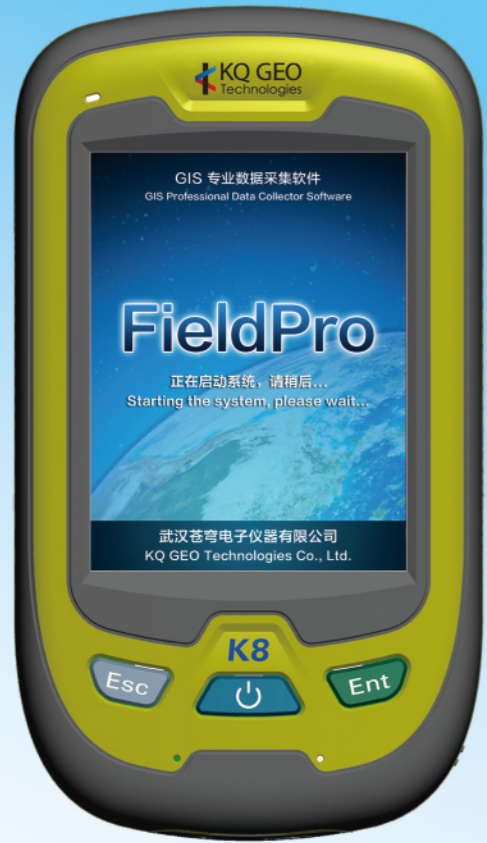
1

2

3

4

Audio guidance
With audio guidance for operation convenience

Bluetooth auto-reconnection
The Bluetooth will reconnect automatically after disconnected, improving fieldwork efficiency

Advance motherboard
Advanced BD970 or NovAtel motherboard integrated to ensure good and stable performance

Compatible with various CORS
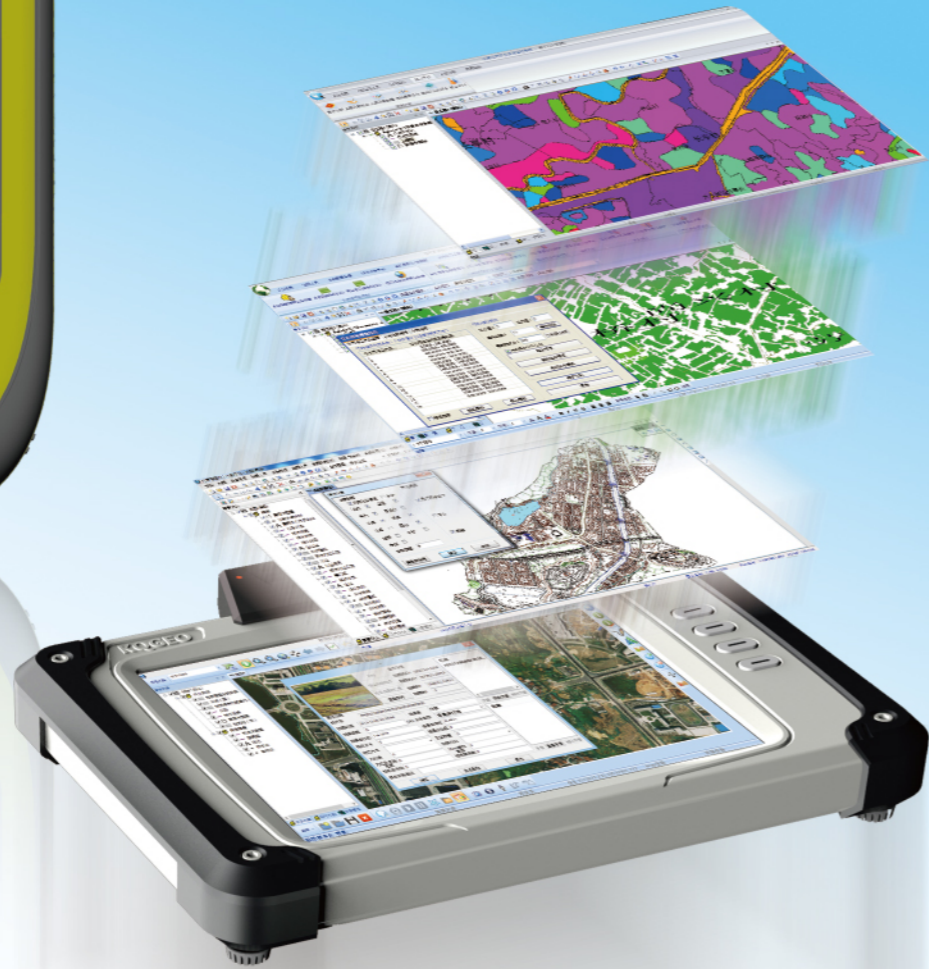Support various CORS such as VRS, MAX, as well as single reference station CORS

5

6

7

8

M8
M8 Intelligent RTK
New trend of surveying
SERIES

FieldPro

FieldPro

M8 Technical Specifications

System	
Processor	454MHz industrial level processor
Memory capacity	256M Byte DDR2 SDRAM
Saving capacity	2G Byte NAND Flash

GNSS technical parameters		
Mother board type	Compatibility with multiple- frequency multi-satellite mother boards, such as BD970, BD920, OEM615, OEM 628 and so on	
Tracking channel	220 channel (BD920）: -GPS: L1 C/A, L2E, L2C, L5 -GLONASS: L1 C/A, L1 P, L2 C/A, L2 P -GIVOVE-A/B -BD-2: B1/B2 -SBAS	120 channel (OEM615): - GPS: L1, L2, L2C - GLONASS: L1, L2 - Galileo: E1、GIVOVE-A/B - Compass - SBAS
Positioning accuracy	Single point positioning: 2-3 m	
	Static network post-processing: horizontal: $\pm(2.5\,mm + 1ppm)$ height: $\pm(5\,mm + 1ppm)$	
	PPP(static) post-processing: 5cm	
	PPP(dynamic) post-processing: 10cm ~ 20cm	
	Dynamic route post-processing: 5cm ~ 20cm	
	RTK: horizontal: $\pm(10\,mm + 1ppm)$ Height: $\pm(20\,mm + 1ppm)$	

Communication parameters	
GSM/3G	WCDMA(850/900/1700/1900/2100NHz) GSM（850/900/1800/1900MHz）
Bluetooth	2.4GHz V2.0+EDR
U disc	Support U disc storage extension up to 64GB, support hot plug
Built-in UHF	Adjustable 0.5W/2W, support 5 km working distance， 9600 or 19200bps
Indicator led	Power led, satellite led, communication led
Key	One power key, two function keys
Port	USB 2.0
	RS232 serial port, debugging port
	TNC UHF antenna port
Application function	Speaker for voice broadcast

Power supply	
Battery	Dual power supply + assistant battery design (4400mAh × 2+650mAh), the main battery supports hot plug, changing battery without powering off
External power supply	Support 9~36V DC battery as power supply; Support 220V AC as power supply

Hardware physical	
Size	φ184.5 × 105mm
Weight	1.5kg (with battery)

Working circumstance	
Working temperature	- 45℃~+65℃
Memory temperature	- 55℃~+85℃
Water/ dust-proof	IP67

FieldPro fieldwork collecting software

Multiple functions contain surveying, GIS collection, road, coordinate system, sky plot and etc.

GIS data collection

Support customized feature definition, support various data format for importing and exporting

Fast map loading

Support various vector data format loading such as shp., whs. Loading 10GB image or hundred MB vector map as background very fast