DK100 DEVELOPMENT KIT

Version 20-02-2023

GENERAL

System	Linux OS
Web UI	- Accessible via Wi-Fi, Ethernet - Support configuration, status checking, data transfer, data storage and system upgrade
Network protocol	TCP, MQTT[1], Ntrip Server, Ntrip Caster
Dimensions	140mm*106mm*15mm

STANDARD COMPONENTS

GNSS board	- Full-constellation tracking - Single-antenna & dual-antenna optional - RTK accuracy: 8mm+1ppm Horizontally 15mm+1ppm Vertically
Bluetooth module	Bluetooth 4.0 dual mode
WiFi module	802.11 a/b/g/n/ac
4G module	FDD-LTE B1/B3/B5/B7/B8 TDD-LTE B38/B39/B40/B41 TDSCDMA B34/B39 WCDMA B1/B2/B5/B8 GSM B2/B3/B5/B8 CDMA1x/CDMA2000 BC0/BC1
Memory module	8GB[2]

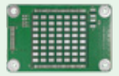
ELECTRICAL

Voltage	9 - 28V DC
Power consumption	3.5 W, typical

ENVIRONMENTAL

Working temperature	-40 ℃ to + 75 ℃
Storage temperature	-55 ℃ to + 85 ℃

OPTIONAL ACCESSORIES

UHF module	- Support mainstream transmission protocols - Connect to 57*36mm adaptor board 
GNSS antenna	- SA500 choke ring antenna - SA100 geodetic antenna
LED indicator panel	Include battery, satellite tracking, RTK status and network
Connector & Cable	- SMA to MMCX connector - TNC to MCX connector - RJ45 connector - 10-pin serial connector - IPEX to MCX/MMCX cable

Note:

1. The MQTT protocol is customizable.
2. The 8GB memory can be customized for larger size.

All specifications are subject to change without notice.

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DK100

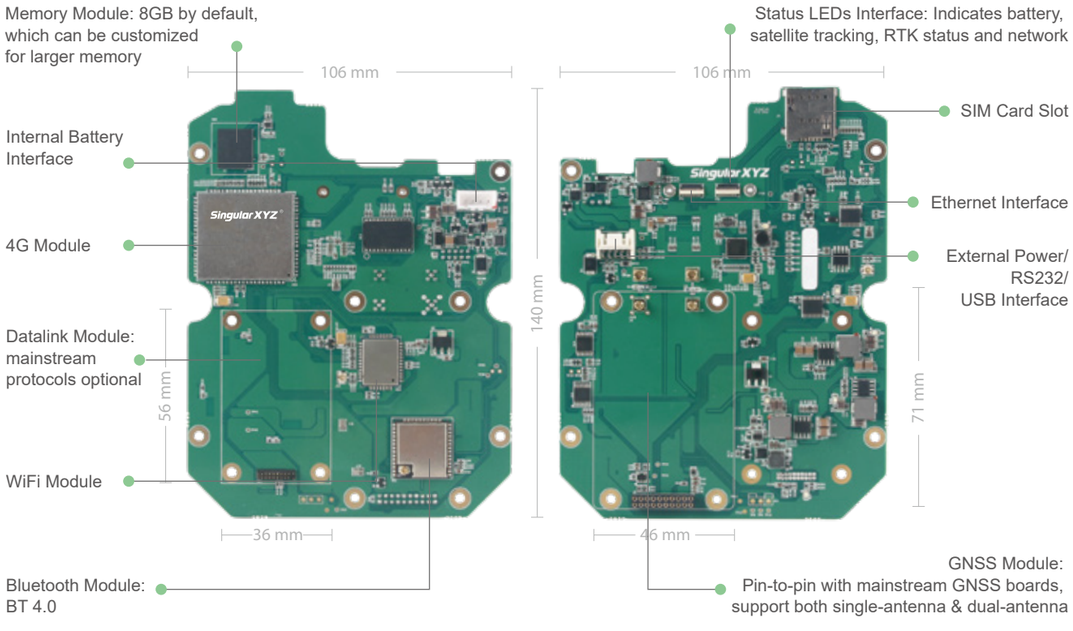
DEVELOPMENT KIT

READY TO USE

Make Your GNSS Development Easier

DK100 DEVELOPMENT KIT

The DK100 is a multi-functional development kit that specially made for GNSS related applications. Integrated GNSS board, 4G module, radio module, WiFi/Bluetooth/Ethernet module, large memory and status indicators on a single PCBA, the DK100 provides unlimited possibilities for your development.



APPLICATIONS

CORS Construction

Precision Agriculture

Smart Navigation

Robotics

Monitoring

Construction

DK100 DEVELOPMENT KIT

Especially designed for system developers, the DK100 development kit shows high compatibility and easy integration. With a clean and comprehensive web page, a full set of optional accessories, professional support and customization, users can develop their own various systems with confidence and ease.

Detailed Status:

Satellite tracking, position information and device working status.

DDNS/NAT-DDNS:

Support common DDNS and NAT-DDNS service providers for remote control.
- DDNS: NO-IP, DynDNS, Zoneedit, FreeDNS
- NAT-DDNS: Ngrok, NATAPP

Work Management:

Support industry-standard protocols and formats.
- GNSS raw data recording and download.
- Data transmission configuration.

Upgrade:

Remotely upgrade the system firmware via the web server.

RELATED PRODUCTS

- Full-constellation signal receiving
- High gain and wide beam width
- LNA for out-of-band rejection, suppress the EMI
- GFRP rugged housing with IP67 protection

SA500 CHOKE RING ANTENNA

- Multi-point feeding design for high phase center stability
- Full-constellation tracking for challenging environments
- Strong anti-electromagnetic interference performance
- IP67 durable, easy-installation design

SA100 GEODETIC GNSS ANTENNA