

K8-SERIES

GNSS OEM MODULES

UNLOCK YOUR POSSIBILITIES

Designed for Your Versatile Integrations
in Various Applications



Ease of Integration



Low Power



Full Constellation



Versatile Selections



GNSS+INS



High Precision



Wide Applications



Singular XYZ

K8 SERIES



K803 Lite(L1)



K803 Lite



K803S



K803



K823

GNSS MODULES

	Single-frequency	Dual-frequency	Triple-frequency	Triple-frequency	Dual-frequency	
Signal	BDS	B1I, B2I/B3I	B1I, B2I, B3I, B1C, B2a, B2b	B1I, B2I, B3I, B1C, B2a, B2b	B1I, B3I, B1C*	
	GPS	L1C/A	L1C/A, L2P,L2C, L5	L1C/A, L2P,L2C, L5, L1C	L1, L2	
	GLONASS	L1, L2	L1, L2	L1, L2, L3*	L1, L2	
	GAL	E1, E5b	E1, E5b, E5a	E1, E5b, E5a, E6*, E5 AltBoc*	E1, E5b	
	QZSS	L1C*	L1C, L2, L5	L1C, L2, L5, L1C/A	L1, L2*	
	SBAS	L1	L1, L5	L1, L5	L1	
	Navic	-	L5	L5	-	
	L-Band*	-	-	+	+	
	Standalone	H:≤1.5m V:≤3.0m	H:≤1.5m V:≤3.0m	H:≤1.5m V:≤3.0m	H:≤1.5m V:≤3.0m	H:≤1.5m V:≤3.0m
	DGPS	H:≤0.3m V:≤0.5m	H:≤0.3m V:≤0.5m	H:≤0.3m V:≤0.5m	H:≤0.3m V:≤0.5m	H:≤0.3m V:≤0.5m
Positioning Accuracy	RTK	H:≤8mm+1ppm V:≤15mm+1ppm	H:≤8mm+1ppm V:≤15mm+1ppm	H:≤8mm+1ppm V:≤15mm+1ppm	H:≤8mm+1ppm V:≤15mm+1ppm	
	Velocity	≤0.02m/s	≤0.02m/s	≤0.02m/s	≤0.02m/s	
Heading Accuracy	Azimuth				0.2°/R	
	Roll or Pitch				0.3°/R	
Update Rate	Raw Data	10Hz	10Hz	20Hz	20Hz	
	RTK	10Hz	10Hz	20Hz	20Hz	
Function	IMU	-	-	support	support	
	Serial Port	4×LVCMOS	4×LVCMOS	4×LVCMOS	3×LVCMOS	
I/O	PPS	1	1	1	1	
	EVENT	2	2	2	2	
	SPI	1	1	1	1	
Physical & Electrical Specifications	Size	30×30×3.2 mm	30×30×3.2 mm	30×30×3.2 mm	30×40×3.2 mm	
	IO	LGA 82Pin, 1.27mm	LGA 82Pin, 1.27mm	LGA 82Pin, 1.27mm	LGA 60Pin, 1.27mm	
	Weight(g)	8	8	8	10	
	Input Voltage	+3.3V DC	+3.3V DC	+3.3V DC	+3.3V DC	
	Power Consumption(w) ¹	0.85	0.85	1	1.6	

Note: "-" do not support "+" conditional support "*" upgradeable
 1. The true value will be affected by voltage and working temperature.
 2. R: The length of heading baseline in meter.

BOARDS



K803_EK0405



K803_EK0407



K803_EK0610



K823_EK0407

	Size	40×50 mm	46×71 mm	60×100 mm	46×71 mm
I/O	Serial Port	4×LVCMOS	3×LVCMOS	3×LVCMOS, 1×RS232	3×LVCMOS
	PPS	1	1	1	1
	EVENT	2	2	2	2
	VARF	1	1	1	-
	ATOM	1	1	1	-
	SPI*	1	1	1	1
Physical & Electrical Specifications	IO	2×22, 1.27mm	2×12, 2mm	2×22, 2mm	2×12, 2mm
	Weight(g)	15	20	34	24
	Input Voltage	+3.3-5.5V DC	+3.3-5.5V DC	+3.3-5.5V DC	+3.3-5.5V DC
	Power Consumption(w) ¹	1.2	1.2	1.2	1.8
	Support Module Type	K803S	K803 Lite(L1), K803 Lite, K803S, K803	K803S	K823



EVK-K803



EVK-K823

EVALUATION KIT

	Size	73.5×100×22mm	73.5×100×22mm
I/O	Serial Port	1×RS232, 3×LVCMOS	1×RS232, 3×LVCMOS
	PPS	1	1
	EVENT	2	2
	BT	1	1
	GPIO	2	2
Physical & Electrical	IO	16PIN, 2.5mm	16PIN, 2.5mm
	Input Voltage	+5-12V DC	+5-12V DC
	Power Consumption(w) ¹	1.5	2





* Upgradeable

1. The true value will be affected by voltage and working temperature.

Company Profile


SingularXYZ Intelligent Technology Ltd. is devoted to satellite navigation high-precision industry products and solutions, focusing on geospatial information, agriculture, machine control, robots and IoT industries, providing customers with reliable, stable and cost-effective professional products and solutions, which is committed to the improvement of human work results and efficiency.

Version 22-11-2021

 +86-21-60835489
 +86-21-60835497
 singularxyz@singularxyz.com
 www.singularxyz.com

SingularXYZ

SingularXYZ Intelligent Technology Ltd.

 Floor 2, Building A, No. 599 Gaojing Road, 201702 Shanghai, China