Zenith06 Pro Datasheet

Ver1.0

1. Configuration

No.	Version	Configuration
1	Zenith06 Pro	Linux + Ublox + B/T+**IMU**

2. Data

Item	Sub-item	Description	
GNSS Performance	OEM Board	Ublox-F9P	
	Channels	184	
	Tracking	GPS L1C/A L2C GLO L1OF L2OF GAL E1B/C E5b BDS B1I B2I QZSS L1C/A L2C	
	Update Rate	RTK up to 10 Hz	
	Position Accuracy	RTK 0.01 m + 1 ppm CEP	
	Initialization time	RTK < 10 sec	
	Acquisition	Cold Start	24 s
		Aided Start	2 s
		Re-acquisition	2 s
	Sensitivity	Tracking and Navigation	-167 dBm
		Cold Start	-148 dBm
		Hot Start	-157 dBm
		Re-acquisition	-160 dBm
Electrical	Battery	Built-in and non-replaceable battery, 3.85V/6120mAh. Its operating time should last for more than 10 hours in Rover mode at room temperature.	
	Input Voltage	DC 5V/2A	
System Configuration	Operating System	Linux	
	Memory	512M DDR3	
	Storage	8 GB (2G is occupied by operation system, 6 GB is available.)	
	Bluetooth	BT5.0	
	WIFI	802.11b/g/n (enabled by final hardware & software, default to disable)	
	Network	Non Network Module	

Data Interface	TYPE-C Port	1 TYPE-C port supporting USB 2.0；Non OTG；	
User Interface	Button	Power button, used to switch on and switch off device. Press and hold for 3s to switch on device. Press and hold for 2s to switch off device. Press and hold for 12s to reset device.	
	System reset.	1. Use power cable or data cable to connect to the FLX100 plus to a computer or a power source. 2. Press the button until all LEDs light up (do not release the button), then keep pressing for around 5 seconds until all LEDs are turned off, release the button. 3. After that, all LEDs will flash, it's a sign to ask if users want to enter the system reset mode. 4. Press again and hold until all LEDs off to enter the system reset double-check steps, or, press shortly to turn on receiver as usual. 5. If really need to enter the system reset mode, please follow the next steps: ① When satellite LED is on(green), press and hold for around 5 seconds until this LED is off. (If the following steps are not conducted correctly within 60s, system reset fails, receiver will reboot.) ② Press again and hold for around 5 seconds until satellite LED is on. ③ Press shortly, all LEDs flash, system reset is ongoing. After reset is done, receiver will auto reboot.	
	Device reset	When device is stuck, press and hold 12s, device will be powered off by force. Device will be reset.	
	Indicator	Satellite indicator (Green)	Solid when available to position
		Data-link indicator (Green)	Solid when transmitting differential data
		Connection indicator（Blue）	Solid when B/T is connected.
		Power indicator (Red-Green)	Charging: solid red when charging; solid green when charging is finished. Operating: solid green when battery is >10%, solid red when battery power is <10%. (3 Beeps every 10 minutes);
	Speaker	Non TTS	
	Buzzer	Device turn on: on beep Device ready: one beep When operating: one beep per press Low battery power warning: 3 beeps every 10 min Device turn off: 1 long beep	
Physical	Dimension	139*80.6*31mm	
	Weight	<0.32kg	

Environment	Operating Temperature	-40℃ ～ +65℃
	Storage Temperature	-40℃ ～ +80℃
	Waterproof/Dustproof	IP67
	Shock Resistance	2m topple over with pole to concrete floor at normal temperature, as well as 1.2m free drop.待定
	Humidity	待定

FCC Warning:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Information (SAR)

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the EUT transmitting at the specified power level in different channels. The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of www.fcc.gov/oet/ea/fccid.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

IC warning statements:

-English Warning Statement:

RSS-GEN ISSUE 5, 8.4 User manual notice

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

The digital apparatus complies with Canadian CAN ICES-3 (B)/NMB-3(B).

-French Warning Statement:

RSS - Gen version 5, 8.4 avis du manuel de l'utilisateur

Cet appareil contient un émetteur / récepteur sans licence conforme au RSS sans licence d'innovation, science et développement économique Canada.L'opération doit satisfaire aux deux conditions suivantes:

Cet équipement peut ne pas causer d'interférence.

L'équipement doit accepter toute interférence, y compris toute interférence qui pourrait entraîner un fonctionnement indésirable de l'équipement.

Specific Absorption Rate (SAR) information: This device meets the government's requirements for exposure to radio waves. The guide lines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health.

The SAR limit of ISED (Canada) is 1.6 W/kg averaged over one gram of tissue. Device types: Portable _PMN NAME_Smart Antenna (IC: 9950A-ZENITH06PRO) has also been tested against this SAR limit. according to this standard is less than 1.6W/kg w.

Informations sur le débit d'absorption spécifique (DAS) : cet appareil est conforme aux exigences gouvernementales en matière d'exposition aux ondes radio. Les lignes directrices sont basées sur des normes qui ont été élaborées par des organisations scientifiques indépendantes grâce à une évaluation périodique et approfondie d'études scientifiques. Les normes comprennent une marge de sécurité substantielle conçue pour assurer la sécurité de toutes les personnes, quel que soit leur âge ou leur état de santé.

La limite SAR d'ISED (Canada) est de 1,6 W/kg en moyenne sur un gramme de tissu. Types d'appareil : __ Portable __PMN NAME__ Smart Antenna __ (IC : 9950A-ZENITH06PRO) a également été testé par rapport à cette limite SAR. selon cette norme est inférieure à 1,6 W/kg w.