# **SPECIFICATIONS**

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Signal tracking     220 channels (standard),855 channels (optional), 555 channels (optional), <sup>213</sup> BeiDou (B), 22, 83,     GPS (L1C/A, L1C, L2C, L5),       Generation (L1C/A, L1P, L2A, L2P, L3),     Generation (L1C/A, L1P, L2A, L2P, L3),       Colos (B), 22, 25, 25, 25, 25, 25, 25, 25, 25, 25	Satellite Signals Tracked Simultaneous	
Instrument     Bip Doug (B1, B2, B3)     The second processing decomposition of constraints of the second processing decomposition decomposite decomposition decompositis decomposition decompositis		
eFS (LC/A, LIC, LiZ, LIZ, LIZ, LIZ, LIZ, LIZ, LIZ, LIZ, LI		
Gelles (EL, Sa, ES, AL, BASC, E6)       Geness (LC), LP, L2C, LP, L3C, LP, L3       GNSS features       Positioning section       Formation (LC), LP, L2C, LP, L3C, LP, L3C, LD, LC, L2C, LS, LEX)       GNSS features       Positioning section       Formation (LC), LP, L2C, LY, LSK, LD, LC, LC, L2C, LS, LEX)       Code differential DEPS/RCM Mytically       Horizontal: Score Jopm       Code differential DEPS/RCM Mytically       Horizontal: Score Jopm       Feat-lines (Kneematic surveying       Horizontal: Score Jopm       Vertical: Smm+0, Spam       RTK Initialization time       2~38.       User Interaction       Operaing system       Univ       Filteraction       Operaing system       User Interaction       Supporting Chinese, English, Korean, Russian, Portuguess, Spanish, Turkish and user define       Supporting Chinese, English, Korean, Russian, Portuguess, Spanish, Turkish and user define       Immediate Lights       Vertice Joperating system       123mm(Diameter xL12mm(Height)       Weight     L12mm(Diameter xL12mm(Height)       Weight     L12mm(Diameter xL12mm(Height)       Weig		
Glonass (LLC/A, LP, L2C/A, L2P, L3)       GNSS features     Positioning output rate: 1Hz, 2Hz, 5Hz, 10Hz, 20Hz & 50Hz (depends on installed option)       Initialization reliability-393 39K       Positioning precision       Ross features       Positioning precision		
Statures     Statures     Statures     Positioning uptar tate: 1Hz, SHz, SHZ		
CNSS features     Positioning output rate:1Hz, 2Hz, 5Hz, 10Hz, 20Hz & 50Hz (depends on installed option)       Initialization reliability:>99 99%       Code differential DGRF/ARCM Typically     Previound 12:5cm=1ppm       Vertical: Som=1ppm     Vertical: Som=1ppm       State (phase) with long observations     Horizontal: Smm-1ppm       Horizontal: Smm-1ppm     Vertical: Smm-1ppm       Vertical: Smm-1ppm     Vertical: Smm-1ppm       Horizontal: Smm-1ppm     Vertical: Smm-1ppm       Vertical: Smm-1ppm     Vertical: Smm-1ppm       Vertical: Smm-1ppm     Vertical: Smm-1ppm       Vertical: Smm-1ppm     Vertical: Smm-1ppm       Voice guide     Noice Intelligent voice technology provides status and voice guide       Voice Intelligent voice technology provides status and voice guide     Supportion       Hardware performance     Supporting Chnese, Englich, Korean, Russian, Portugues, Spanish, Turkish a		
Initialization reliability:>99.39%       Code differential DGF/SRUCM Typically     Horizontal: 25cm-1ppm     Vertical: Scm+1ppm       Static Iphase) with long observations     Incritontal: 35cm-10pm     Vertical: Scm+0.5pm       Real-time Klemantic surveying     Horizontal: 35cm+10pm     Vertical: Scm+0.5pm       Network RTK     Horizontal: 35cm+0.5pm     Vertical: Scm+0.5pm       RTK initialization time     2*8     Static phase) with long observations       Indicators     Three indicate lights     Static phase) with long observations       Indicators     Three indicate lights     Vertical: Scm+0.0ppm       Voice guide     Noice indicate lights     Vertical: Scm+0.0ppm       Voice guide     Noice indicate lights     Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define       JageNetry included     Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define       Methysis     14g/detry included     Vertical: Scm+10pm       Methysis     14g/genetry included     Vertical: Scm+10pm       Methysis     14g/genetry included     Vertical: Scm+10pm       Methysis     14g/genetry included     Vertical: Scm+10pm       Methysis     14g	GNSS features	
Evolutioning precision     Vertical: Scm+1ppm     Vertical: Scm+1ppm       SBAS positioning accuracy     Typically: 5:m 30.RMS     Stm+1ppm     Vertical: Scm+1ppm       SBAS positioning accuracy     Typically: 5:m 30.RMS     Stm+1ppm     Vertical: Scm+1ppm       Static (bhase) with long observation     Horizontal: 8:mm+1ppm     Vertical: Scm+1ppm     Vertical: Scm+1ppm       Network RTK     Horizontal: 8:mm+1ppm     Vertical: Scm+1ppm     Vertical: Scm+1ppm       Metwork RTK     Horizontal: 2:mm+0.Sppm     Vertical: Scm+1ppm     Vertical: Scm+1ppm       Metwork RTK     Horizontal: 2:mm+0.Sppm     Vertical: Scm+1ppm     Vertical: Scm+1ppm       Metwork RTK     Freely to cordigue and monitor the receiver by accessing to the web server via Wi-F1 and USB     Vertical: Scm+1ppm       Viote guide     Voice intelligent viote techohology provid		Initialization time:<10s
Code differential DGPS/RTCM Typically     Horizontal: 25cm 1ppm       StaSp positioning accuracy     Typically 5 m 308MS       Static (phase) with long observations     Horizontal: 25cm 1ppm       Real-time Kinematic surveying     Horizontal: 8mm-1ppm       Network RTK     Horizontal: 8mm-1ppm       RK Initialization time     2 *8       User Interaction     2       Operaing system     Linux       Buttons     Single button operation       Indicators     Three indicate lights       Voice parl     Preally to configure and monitor the receiver by accessing to the web server via Wi-Fi and USB       Voice parl     Horizontal: 8mm-1ppm       Voice parl     Horizontal: Simm/Oppm Provides status and voice guide       Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define       Handware performance     129mm(height)       Operating     +55 C*+60°C       Humidity     100% Kon-condensing       Waterproof/Dustgroof     IP68 standard, protected from long time immersion to depth of 1m       IP68 standard, protected from long time immersion to depth of 1m       IP68 standard, protected from long time immersion to depth of 1m       IP68 standard, protected from lon		Initialization reliability:>99.99%
SBAS positioning accuracy     Typically < 5m 308Mis	Positioning precision	
Static (phase) with long observations     Horizontal: 8.mm-0.5pm     Vertical: 5.mm-1.0pm       Rel-time Kinematic surveying     Horizontal: 8.mm-0.5pm     Vertical: 5.mm-1.0pm       Network RTK     Horizontal: 8.mm-0.5pm     Vertical: 5.mm-1.0pm       RK: Initialization time     2-8.       User Interaction     Operaing system     I.inux       Buttons     Single button operation     Indicators       Three indicate lights     Three indicate lights     Vertical: 5.mm+0.5pm       Veice guide     Voice guide     User indicate lights     Veice guide       Veice guide     Noice intelligent voice technology provides status and voice guide     Supporting Chinese, English, Koran, Russian, Portuguese, Spanish, Turkish and user define       Hardware performance     Dimension     129mm(Dameter)x112mm(Height)     Weight     Tigg Standard, Fully protected against blowing dust       Material     Magnesium aluminum alloy shell     Operating     -455°C - K85°C       Humidity     100% Non-condensing     Weight and Standard, fully protected against blowing dust       Shock and wbration     Weithstand 2 meters pole drop onto the cement ground naturally     Power Supply       Power Supply     9.25V Co. ovenvolage protection again and standard,	Code differential DGPS/RTCM Typically	Horizontal: 25cm+1ppm Vertical: 50cm+1ppm
Real-time Kinematic surveying     Horizontal: 8mm+10pm     Vertical: 15mm+10pm       Network RTK     Horizontal: 8mm+0.0pm     Vertical: 15mm+0.5ppm       Operang system     Linux     User interaction       Operang system     Linux     Linux       Buttons     Single button operation     Indicators       Three indicate lights     Three indicate lights     Voice untelligent voice technology provides status and voice guide       Voice intelligent voice technology provides status and voice guide     Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define       Hardware performance     Dimension     129mm(Diameter)k112mm(Height)       Weight     1kg(battery included)       Material     Magnesium aluminum aloy shell       Operaning     -45°C+60°C       Storag     -45°C+60°C       Storag     -45°C+60°C       Vaterproof/Dustproof     IP68 standard, protected from long time immersion to depth of 1m       IP68 standard, protected from long time immersion to depth of 1m       IP68 standard, protected from long time immersion to depth of 1m       IP68 standard, protected from long time immersion to depth of 1m       IP68 standard, foretected from long time immersion to depth of 1m	SBAS positioning accuracy	Typically < 5m 3DRMS
Interaction     Horizontal: Berni-O.Sppm     Vertical: 15mm+0.Sppm       User Interaction     2*8;       User Interaction     2*8;       Buttons     Single button operation       Indicators     Three indicate lights       Web UI     Freely to configure and monitor the receiver by accessing to the web server via Wi-Fi and USB       Voice guide     Voice full       Voice guide     Freely to configure and monitor the receiver by accessing to the web server via Wi-Fi and USB       Voice guide     Voice guide       Value performance     Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define       Handware performance     129mm(Diameter/h12mm(Height)       Weight     Ligk standard, protected from long time immersion to depth of 1m       Operating     -55°C *48°C       Humidity     100% Non-condensing       Waterproof/Dustproof     IP68 standard, protected from long time immersion to depth of 1m       IP68 standard, Portocted from long time immersion to depth of 1m       IP68 standard, Nutry Portected against blowing dust       VD op ort     5-PIN LEMO port, 7-PIN USB port (with OTG)       ITh Cradio antenna interface, SIM card slot       UHF modern     Built-in radio, JU	Static (phase) with long observations	Horizontal: 2.5mm+0.5ppm Vertical: 5mm+0.5ppm
TWE initialization time     2~8;     D       Operaing system     Linux       Operaing system     Linux       Buttons     Single button operation       Indicators     Three indicate lights       Web UI     Freely to configure and monitor the receiver by accessing to the web server via Wi-Fi and USB       Voice guide     Voice intelligent voice technology provides status and voice guide       Hardware performance     Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define       Hardware performance     12gmm[Diameteryh112mm[Height]       Weight     Lightatrey included]       Material     Magenian duminum alloy shell       Operaining     -45°C+46°C       Storag     -55°C+46°C       Waterproof/Dustproof     IP68 standard, protexted from long time immersion to depth of 1m       IP68 standard, fully protexted against blowing dust     Witherad 2 melers pole drog onto the cement ground naturally       Power Supply     9-35V DC, overvoltage protection     Shat and Vikitabile 2, typically work range can be 8KM       Gommunications     FUM IEMO port, FUM USB port (with NG To)     ITMC radio anterna interface, SIM card slot       I/O port     FMN IEMO port, FUM USB port (with NG To) <t< td=""><td>Real-time Kinematic surveying</td><td>Horizontal: 8mm+1ppm Vertical: 15mm+1ppm</td></t<>	Real-time Kinematic surveying	Horizontal: 8mm+1ppm Vertical: 15mm+1ppm
User Interaction     Interaction       Buttons     Single button operation       Indicators     Three indicate lights       Web UI     Freely to configure and monitor the receiver by accessing to the web server via Wi-Fi and USB       Voice guide     Voice intelligent voice technology provides status and voice guide       Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define       Hardware performance     Dimension       Dimension     129mm(Biameter)x112mm(Height)       Weight     Liggbatter)       Mageresi in duminum alloy shell     -45°C*46°C       Storag     -45°C*46°C       Waterproof/Dustproof     IP68 standard, protected against blowing dust       Material     Mageresi in blowing dust       Shock and vibration     PF68 standard, protected against blowing dust       Shock and vibration     SPIN telMO port, 7-PIN USB port (with OTG)       VO port     S-PIN LEMO port, 7-PIN USB port (with OTG)       UFF and and minerate repater switchable     Frequency Range       Communication     Rechargeable, removable typically work range can be 8KM       Redica and internet repeater switchable     Frequency Range       Controller equipped NLT, SOUTH, SOUTH, SOUTH, SOUTH, S		Horizontal: 8mm+0.5ppm Vertical: 15mm+0.5ppm
Operaing system     Linux       Suttons     Single button operation       Indicators     Three indicate lights       Web U     Freely to configure and monitor the receiver by accessing to the web server via Wi-Fi and USB       Voice intelligent voice technology provides status and voice guide     Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define       Hardware performance     Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define       Weight     Lightattery included)       Material     Magenesium aluminum alloy shell       Operating     -45°C+40°C       Storag     -55°C+48°C       Humidity     100% Non-condensing       Waterproof/Dustproof     IP68 standard, fully protected gainst blowing dust       Shock and whation     Withshand 2 meters pole drop onto the cenent ground naturally       Power Supply     5-25V DC, overvolage protection       Battery     Rechargeable, removable Lithium-ton battery, 7.4V; standard four batteries power package(optional)       I/O port     Influence treater switchable       I/O port     S-PIN USB port (with OTG)       I/O port     Influence treater switchable       Frequery Range     410 4700Htk		2~8s
Buttons     Single button operation       Indicators     Three indicate lights       Web UI     Freely to configure and monitor the receiver by accessing to the web server via Wi-Fi and USB       Voice guide     Voice intelligent voice technology provides status and voice guide       Buttons     129mm(Diameter)k112mm(Height)       Weight     11g/battery included)       Material     Magnesium aluminum alloy shell       Operating     -45°C-60°C       Storage     -55°C-85°C       Humidity     100% Kon-condensing       Waterproof/Dustproof     IP68 standard, protected rom long time immersion to depth of 1m       P6     100% Kon-condensing       Waterproof/Dustproof     IP68 standard, protected rom long time immersion to depth of 1m       P6 was Supply     9-25 V DC, overvoltage protection       Battery     Rechargeable, removable Lthium-ion battery, 7.4V; standard four batteries power package(optional)       Communications     -51N LEMO port, 7-PIN USB port (with OTG)       I ThC radio and internet repeater switchable     Radio and internet repeater switchable       Frequency Range     410-470MHz     Communication       Communication     Realistandard     Rupy Shandard		
Indicators     Three indicate lights       Web UI     Freely to configure and monitor the receiver by accessing to the web server via Wi-Fi and USB       Voice guide     Noice intelligent voice technology provides status and voice guide       Hardware performance     Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define       Hardware performance     129mm(Diameter)x112mm(Height)       Weight     1kg[battery included]       Material     Magnesium aluminum alloy shell       Operating     -55°C *46°C       Storag     -55°C *46°C       Humidity     100% Non-condensing       Waterproof/Dustproof     IP68 standard, protected against blowing dust       Shock and vibration     Withstand 2 meters pole drop onto the cement ground naturally       Power Supply     9-25V CC, overvoltage protection       Battery     Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)       I/O port     S-PIN LEMO port, 7-PIN USB port (with OTG)       I/M modem     Built-in radio, 3U/2W/3W switchable, typically work range can be 8KM       Frequency Range     410-470MHz       Communication Protocol     Timitak, SOUTH 4, SOUTH 4, SOUTH 4, SOUTH 4, Sotel       Collubar Wolde Bloet		Linux
Web UI     Freely to configure and monitor the receiver by accessing to the web server via Wi-Fi and USB       Voice guide     Voice intelligent voice technology provides status and voice guide       Hardware performance     Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define       Hardware performance     129mm(Diameter)x112mm(Height)       Weight     1kg(batter y included)       Material     Magnesium aluminum alloy shell       Operating     -45°C*+60°C       Storag     -55°C*+65°C       Waterproof/Dustproof     IP68 standard, protected from long time immersion to depth of 1m       IP68 standard, fully protected against blowing dust     Shock and vibration       Weithstand 2 meters pole drop onto the cement ground naturally     925V DC, overvoltage protection       Battery     S-PIN LEMO port, 7-PIN USB port (with OTG)     1TNC radio anterna interface, SIM card slot       J/O port     S-PIN LEMO port, 7-PIN USB port (with OTG)     1TNC radio and interner trepeater switchable       Gommunications     Frequency Range     410-470MHz     Communication Protocol       Communication Protocol     Timalk, SOUTH, SOUTHs, Nutexe, ZHD, Satel     Cellular Mobile Network       Double Module Bluetooth     BLEEMO DH, OL standard, support for android, ios		
Voice intelligent voice technology provides status and voice guide       Supporting Chenese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define       Hardware performance       Weight     129mm(Diameter)x112mm(Height)       Weight     129mm(Diameter)x112mm(Height)       Material     Magresium aluminum alloy shell       Operating     -45°C*+65°C       Mumidity     100% Non-condensing       Humidity     100% Non-condensing       Waterproof/Dustproof     IP68 standard, protected from long time immersion to depth of 1m       IP68 standard, Drotected from long time immersion to depth of 1m       IP68 standard, Drotected from long time immersion to depth of 1m       IP68 standard, Drotected from long time immersion to depth of 1m       IP68 standard, Drotected from long time immersion to depth of 1m       IP68 standard, Drotected from long time immersion to depth of 1m       IP68 standard, Drotected from long time immersion to depth of 1m       IP68 standard, Drotected from long time immersion to depth of 1m       IP68 standard, Drotected from long time immersion to depth of 1m       Gommunications     Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)       Communication     SPIN LEMO port, 7-PIN USB port (with DTG)       I		
Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define       Hardware performance     129mm(Diameter)x112mm(Height)       Weight     14g(battery included)       Material     Magestum aluminum alloy shell       Operating     45°C*46°C       Storag     100% Non-condensing       Waterproof/Dustproof     IP68 standard, fully protected from long time immersion to depth of 1m       IP68 standard, fully protected from long time immersion to depth of 1m       Battery     Rechargeable, removable Lithium-lon battery, 7.4V; standard four batteries power package(optional)       Communications     S-PIN LEMO port, 7-PIN USB port (with OTG)       V/G port     S-PIN LEMO port, 7-PIN USB port (with OTG)       V/G port     S-PIN LEMO port, 7-PIN USB port (with OTG)       V/G port     S-PIN LEMO port, 7-PIN USB port (with OTG)       V/G port     S-PIN LEMO port, 7-PIN USB port (with OTG)       V/G port     S-PIN LEMO port, 7-PIN USB port (with OTG)       V/G port     S-PIN LEMO port, 7-PIN USB port (with OTG)       V/G port     S-PIN LEMO port, 7-PIN USB port (with OTG)       V/H add     Addition all metrace, SIM card slot       Double Network     Doi-TIF/EDD-LTE 4G network modem, downward compatible with WCDMA/CDMA2000 3G a		
Hardware performance     129mm(Diameter)x112mm(Height)       Dimension     129mm(Diameter)x112mm(Height)       Weight     1kg(battery included)       Material     Magnesium aluminum alloy shell       Operating     -45°C*+60°C       Storag     -55°C*+85°C       Humidity     100% Non-condensing       Waterproof/Dustproof     IP68 standard, protected against blowing dust       Shock and vibration     Withstand 2 meters pole drop onto the cement ground naturally       Power Supply     9-25V DC, overvoltage protection       Battery     Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)       Communications     1/VC port       JO port     5-PIN LEMO port, 7-PIN USB port (with OTG)       UF modem     Built-In radio, 1/V/2W/3W switchable, typically work range can be 8KM       Radio and interner trepeater switchable     Frequency Range       Cellular Mobile Network     TDD-LTE/FDD-LTE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G       Double Module Bluetooth     BLEBluetooth 4.0 standard, support for android, ios cellphone connection       Butetorth 2.1 + EDR standard     MVF       WFI     Standard       WFI	Voice guide	
Dimension     129mm(Diameter/x112mm(Height)       Weight     1kg(battery included)       Material     Magnesium aluminum alloy shell       Operating     -45°C+60°C       Storag     -55°C+85°C       Humidity     100% Non-condensing       Waterproof/Dustproof     IP68 standard, fully protected from long time immersion to depth of 1m       IP68 standard, fully protected against blowing dust     Power Supply       Shock and vibration     Withstand 2 meters pole drop onto the cement ground naturally       Power Supply     9-25V DC, overvoltage protection       Battery     Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)       Communications     I/C port       I/D port     5-PIN LEMO port, 7-PIN USB port (with OTG)       UHF modem     Built-in radio, 1W/2W/3W switchable, typically work range can be 8KM       Frequency Range     410-470MHz       Communication Protocol     TrimTalk, SOUTH, SOUTH+, SOUTH-kuace, ZHD, Satel       Cellular Mobile Network     TDD-1TF/FDD-1Te 4 G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G       Double Module Bluetooth     BLEBluetont A.0 standard, support for android, ios cellphone connection       WIFI     0		Supporting Chinese, English, Korean, Russian, Portuguese, Spanish, Turkish and user define
Weight   1g(battery included)     Material   Magnesium aluminum alloy shell     Operating   -45°C*460°C     Storag   -55°C*460°C     Storag   -55°C*460°C     Waterproof/Dustproof   IP68 standard, protected from long time immersion to depth of 1m     IP68 standard, Jully protected against blowing dust   Shock and vibration     Power Supply   9-25 VD, Covervoltage protected against blowing dust     Shock and vibration   Withstand 2 meters pole drop onto the cement ground naturally     Power Supply   9-25 VD, Covervoltage protection     Battery   Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)     Communications		
Material     Magnesium aluminum alloy shell       Operating     -45°C*+60°C       Storag     -55°C*+85°C       Humidity     100% Non-condensing       Waterproof/Dustproof     IP68 standard, protected from long time immersion to depth of 1m       IP68 standard, fully protected against blowing dust     Shock and vibration       Withstand 2 meters pole drop onto the cement ground naturally     Power Supply       Power Supply     9-25V DC, overvoltage protection       Battery     Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)       Communications     S-PIN LEMO port, 7PIN USB port (with OTG)       ITNC radio antenna interface, SIM card slot     UHF modem       Built-in radio, 1W/ZW/3W switchable, typically work range can be 8KM       Frequency Range     410-470MHz       Communication Protocol     TrimTalk, SOUTH+, SOUTH+, SOUTH+, Nuace, ZHD, Satel       Cellular Mobile Network     TDD-1E*/F/D-D1E*/GPD-		
Operating     -45°C*+60°C       Storag     -55°C*+85°C       Humidity     100% Non-condensing       Weterproof/Dustproof     IP68 standard, protected against blowing dust       Shock and vibration     Withstand 2 meters pole drop onto the cement ground naturally       Power Supply     9-25V DC, overvoltage protection       Battery     Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)       Communications     17NC radio antenna interface, SIM card slot       UHF modem     Built-in radio, 11V/2W/3W switchable, typically work range can be 8KM       Radio and internet repeater switchable     Communication Protocol       CrimTalk, SOUTH, SOUTH-, SOUTH-, SOUTH-, SOUTH-, huace, ZHD, Satel     Cellular Mobile Network       Do-LIF_/EDD-LITE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G     Double Module Bluetooth       Bleutooth 2.1 + EDR standard     Realizing close range (shorter than 10cm) automatic pair between receiver and controller       (controller equipped NFC wireless communication module needed)     WiFI       WiFI     Standard     802.11 b/g standard       WIFI data link     To work as the datalink that receiver is able to broadcast and receive differential data via WIFI       Data Storage     Support exte		
Storag     -55°C*485°C       Humidity     100% Non-condensing       Waterproof/Dustproof     IP68 standard, protected from long time immersion to depth of 1m       IP68 standard, fully protected against blowing dust     Shock and vibration       Withstand 2 meters pole drop not to the cement ground naturally     Power Supply       9-25V DC, overvoltage protection     Battery       Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)       Communications     5-PIN LEMO port, 7-PIN USB port (with OTG)       1 TNC radio antenna interface, SIM card slot     ITMC radio anternate repeater switchable, typically work range can be 8KM       Redia and internet repeater switchable     Frequency Range       Communication Protocol     TrimTalk, SOUTH, SOUTH+, SOUTH+, Nuace, ZHD, Satel       Cellular Mobile Network     TDD-LTE/FDD-LTE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G       Double Module Bluetooth     BLEBluetooth 4.0 standard, support for android, ios cellphone connection       WIFI     (controller equipped NFC wireless communication module needel)       WIFI     Solandard       WIFI Hotspot     The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control and moditor receiver       WIFI data link		
Humidity     100% Non-condensing       Waterproof/Dustproof     IP68 standard, folly protected from long time immersion to depth of 1m       IP68 standard, folly protected against blowing dust     Shock and vibration       Shock and vibration     Withstand 2 meters pole drop onto the cement ground naturally       Power Supply     9-25V DC, overvoltage protection       Battery     Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)       Communications     I/O port       J/O port     S-PIN LEMO port, 7-PIN USB port (with OTG)       UHF modem     Built-in radio, JW/2W/3W switchable, typically work range can be 8KM       Frequency Range     410-470MHz       Communication Protocol     TrimTalk, SOUTH, SOUTH+, SOUTHx, huace, ZHD, Satel       Cellular Mobile Network     TDD-LTE/FD-LTE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G       Double Module Bluetooth     BLEBluetooth 4.0 standard, support for android, ios cellphone connection       NFC Communication     Realizing close range (shorter than 10cm) automatic pair between receiver and controller       (controller equipped NFC wireless communication module needed)     WiFi       WiFi     The WIFI hotspot     The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the		
Waterproof/Dustproof     IP68 standard, protected from long time immersion to depth of 1m       IP68 standard, fully protected against blowing dust     Shock and vibration     Withstand 2 meters pole drop onto the cement ground naturally       Power Supply     9-25V DC, overvoltage protection     Battery       Battery     Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)       Communications     1     TNC radio antenna interface, SIM card slot       UHF modem     Built-in radio, 1W/2W/3W switchable, typically work range can be 8KM       Radio and internet repeater switchable     Triminalk, SOUTH, SOUTH, SOUTH, Nuace, ZHD, Satel       Cellular Mobile Network     TDD-LTE/FOD-LTE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G       Double Module Bluetooth     BLEBluetooth 4.0 standard, support for android, ios cellphone connection       Bluetooth 2.1 + EDR standard     NFC Communication       Realizing Lose range (Shorter than 10cm) automatic pair between receiver and controller       (controller equipped NFC wireless communication module needed)       WiFI     Standard       802.11 b/g standard     S02.11 b/g standard       WiFI     To work as the datalink that receiver is able to broadcast and receive differential data via WIFI       Data Storage     Su		
IP68 standard, fully protected against blowing dust     Shock and vibration   Withstand 2 meters pole drop onto the cement ground naturally     Power Supply   9-25V DC, overvoltage protection     Battery   Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)     Communications   Internationa     (/O port   5-PIN LEMO port, 7-PIN USB port (with OTG)     UHF modern   Builtin radio, UW/2W/3W switchable, typically work range can be 8KM     Frequency Range   410-4700MHz     Communication Protocol   TrimTalk, SOUTH, SOU		· · · · · · · · · · · · · · · · · · ·
Shock and vibration     Withstand 2 meters pole drop onto the cement ground naturally       Power Supply     9-25V DC, overvoltage protection       Battery     Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)       Communications     IVD port       1/O port     5-PIN LEMO port, 7-PIN USB port (with OTG)       1 TNC radio antenna interface, SIM card slot     Radio and internet repeater switchable       Radio and internet repeater switchable     Radio and internet repeater switchable       Frequency Range     410-470MHz       Communication Protocol     TrimTalk, SOUTH, SOUTH, SOUTH, SOUTH, SOUTH, SOUTH, SOUTH, SOUTH, Soure Communication       Bluetooth     BLEBluetooth 4.0 standard, support for android, ios cellphone connection       Bluetooth     Bluetooth 2.1 + EDR standard       Realizing close range (shorter than 10cm) automatic pair between receiver and controller       (controller equipped NFC wireless communication module needed)       WiFI     Standard       Standard     802.11 b/g standard       The WiFI hotspot     The WiFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control and moditor receiver       WiFI     Standard     802.11 b/g standard       Data storage/ Transmission	Waterproof/Dustproof	
Power Supply     9-25V DC, overvoltage protection       Battery     Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)       Communications     Image: Standard Standa		
Battery     Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)       Communications     5-PIN LEMO port, 7-PIN USB port (with OTG)       1/O port     1 TNC radio antenna interface, SIM card slot       UHF modem     Built-in radio, 1W/2W/3W switchable, typically work range can be 8KM       Radio and internet repeater switchable, typically work range can be 8KM       Communication Protocol     TrimTalk, SOUTH+, SOUTH+, SOUTH, huace, ZHD, Satel       Cellular Mobile Network     TDD-LTE/FDD-LTE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G       Double Mobile Network     TDD-LTE/FDD-LTE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G       Double Module Bluetooth     BLEBluetooth 4.0 standard, support for android, ios cellphone connection       Bluetooth 2.1 + EDR standard     NFC Communication module needed)       WIFI     Gommunication module needed)       WIFI     Buetototh 1b fg standard       WIFI data link     To work as the datalink that receiver is able to broadcast and receive differential data via WIFI       Data storage     Support external USB storage and automatical cycle storage       Support external USB storage and automatical cycle storage     Changeable record interval, up to 50Hz raw data collection           Data Storage     Support		
Communications     Service       I/O port     Service       ITINC radio antenna interface, SIM card slot       UHF modem     Built-in radio, 1W/2W/3W switchable, typically work range can be 8KM Radio and internet repeater switchable       Frequency Range     410-470MHz       Communication Protocol     TrimTalk, SOUTH, SOUTH+, SOUTH+, SOUTH+, hace, ZHD, Satel       Cellular Mobile Network     TDD-ITE/FDD-ITE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G       Double Module Bluetooth 4.0 standard, support for android, ios cellphone connection       Bluetooth 2.1 + EDR standard       Realizing close range (shorter than 10cm) automatic pair between receiver and controller (controller equipped NFC wireless communication module needed)       WIFI       Standard     802.11 b/g standard       WIFI Hotspot     The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control and moditor receiver       To work as the datalink that receiver is able to broadcast and receive differential data via WIFI Data storage     8GB SSD internal storage       Support external USB storage and automatical cycle storage Changeable record interval, up to 50Hz raw data collection     USB data transmission, supporting FTP/HTP data download       Data Storage     SGB SSD internal storage Support external USB storage and automatical cycle storage Changeable record i		
I/O port   5-PIN LEMO port, 7-PIN USB port (with OTG)     1 TNC radio antenna interface, SIM card slot     UHF modem   Built-in radio, 1W/2W/3W switchable, typically work range can be 8KM     Frequency Range   410-470MHz     Communication Protocol   TrimTalk, SOUTH+, SOUTH+, SOUTH×, huace, ZHD, Satel     Cellular Mobile Network   TDD-LTE/FDD-LTE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G     Double Module Bluetooth   BLEBluetooth 4.0 standard, support for android, ios cellphone connection     Bluetooth 2.1 + EDR standard   Realizing close range (shorter than 10cm) automatic pair between receiver and controller     (controller equipped NFC wireless communication module needed)   WiFI     Standard   802.11 b/g standard     WIFI data link   To work as the datalink that receiver is able to broadcast and receive differential data via WIFI     Data storage   SGB SSD Internal storage     SGB SSD Internal Storage   SGB SSD Internal storage     Support external USB storage and automatical cycle storage   Changeable record interval, up to 50Hz raw data collection     Data Transmission   USB data transmission, supporting FTP/HTTP data download     Data Format   Differential data format: NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF     Network model support: VRS, FKP, MAC, fully su		Rechargeable, removable Lithium-ion battery, 7.4V; standard four batteries power package(optional)
1 TNC radio antenna interface, SIM card slot     UHF modem   Built-in radio, 1W/2W/3W switchable, typically work range can be 8KM     Radio and internet repeater switchable   Frequency Range     410-470MHz   Communication Protocol     Cellular Mobile Network   TDD-ITE/FDD-ITE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G     Double Module Bluetooth   BLEBluetoot 4.0 standard, support for android, ios cellphone connection     Bluetooth 2.1 + EDR standard   Realizing close range (shorter than 10cm) automatic pair between receiver and controller     (controller equipped NFC wireless communication module needed)   (controller equipped NFC wireless communication module needed)     WIFI   Standard   802.11 b/g standard     WIFI Hotspot   The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control and moditor receiver     WIFI data link   To work as the datalink that receiver is able to broadcast and receive differential data via WIFI     Data storage   8GB SSD internal storage     Support external USB storage and automatical cycle storage     Changeable record interval, up to 50Hz raw data collection     Data Transmission   USB data transmission, supporting FTP/HTTP data download     Data Format   Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2		F DIN LEMO part 7 DIN LICE part (with OTC)
UHF modem     Built-in radio, 1W/2W/3W switchable, typically work range can be 8KM       Radio and internet repeater switchable     Radio and internet repeater switchable       Frequency Range     410-470MHz       Communication Protocol     TrimTalk, SOUTH, SOUTH+, SOUTHx, huace, ZHD, Satel       Cellular Mobile Network     TDD-LTE/EDD-LTE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G       Double Module Bluetooth     BLEBluetooth 4.0 standard, support for android, ios cellphone connection       Bluetooth 2.1 + EDR standard     NFC Communication       Realizing close range (shorter than 10cm) automatic pair between receiver and controller (controller equipped NFC wireless communication module needed)       WIFI     Standard       S02.11 b/g standard     WIFI data link       WIFI data link     To work as the datalink that receiver is able to broadcast and receive differential data via WIFI       Data storage//Transmission     BGB SSD internal storage       Support external USB storage and automatical cycle storage     Changeable record interval, up to 50Hz raw data collection       Data Transmission     USB data transmission, supporting FTP/HTTP data download       Data format     Differential data format: CMR+, SCMR+, SCMR 2., RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2       GPS output data format: NMEA 0183, PIK plane coordinates, Binary co	I/O port	
Radio and internet repeater switchable     Frequency Range   410-470MHz     Communication Protocol   TrimTalk, SOUTH, SOUTH×, SOUTH×, huace, ZHD, Satel     Cellular Mobile Network   TDD-ITE/FDD-ITE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G     Double Module Bluetooth   BLEEBluetooth 4.0 standard, support for android, ios cellphone connection     Bluetooth 2.1 + EDR standard   Realizing close range (shorter than 10cm) automatic pair between receiver and controller     (controller equipped NFC wireless communication module needed)   (controller equipped NFC wireless communication module needed)     WIFI   802.11 b/g standard   802.11 b/g standard     WIFI Hotspot   The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control and moditor receiver     WIFI data link   To work as the datalink that receiver is able to broadcast and receive differential data via WIFI     Data storage   8GB SSD internal storage     Support external USB storage and automatical cycle storage   Changeable record interval, up to 50Hz raw data collection     Data Transmission   USB data transmission, supporting FTP/HTTP data download     Data Format   Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 3.0, RTCM 3.1, RTCM 3.2     GPS output data format: CMR+, SCMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2   GPS out		
Frequency Range   410-470MHz     Communication Protocol   TrimTalk, SOUTH, SOUTH, SOUTHx, huace, ZHD, Satel     Cellular Mobile Network   TDD-LTE/FDD-LTE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G     Double Module Bluetooth   BLEBluetooth 4.0 standard, support for android, ios cellphone connection     Bluetooth 2.1 + EDR standard   NFC Communication     Realizing close range (shorter than 10cm) automatic pair between receiver and controller (controller equipped NFC wireless communication module needed)     WIFI   Standard     Standard   802.11 b/g standard     WIFI Hotspot   The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control and moditor receiver     WIFI data link   To work as the datalink that receiver is able to broadcast and receive differential data via WIFI     Data storage   8GB SSD internal storage     Support external USB storage and automatical cycle storage   Changeable record interval, up to 50Hz raw data collection     Data Format   Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 3.0, RTCM 3.1, RTCM 3.2     GPS output data format:   MMEA 0183, PIK plane coordinates, Binary code, Trimble GSOF     Network model support:   VRS, FKP, MAC, fully support NTRIP protocol     Inertial sensing system   Titlt survey (optional) <sup>[21</sup> Bui	OHF modem	
Communication Protocol     TrimTalk, SOUTH, SOUTH, SOUTHx, huace, ZHD, Satel       Cellular Mobile Network     TDD-LTE/FDD-LTE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G       Double Module Bluetooth     BLEBluetooth 4.0 standard, support for android, ios cellphone connection       Bluetoott 2.1 + EDR Standard     Realizing close range (shorter than 10cm) automatic pair between receiver and controller       (controller equipped NFC wireless communication module needed)     WIFI       Standard     802.11 b/g standard       WIFI Hotspot     The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control and moditor receiver       WIFI data link     To work as the datalink that receiver is able to broadcast and receive differential data via WIFI       Data storage     SGB SSD internal storage       Support external USB storage and automatical cycle storage     Changeable record interval, up to 50Hz raw data collection       Data Format     Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2       GPS output data format: NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF       Network model support: VRS, FKP, MAC, fully support NTRIP protocol       Inertial sensing system     Tilt survey (optional) <sup>R1</sup>	Fraguancy Panga	
Cellular Mobile Network   TDD-LTE/FDD-LTE 4G network modem, downward compatible with WCDMA/CDMA2000 3G and GPRS/EDGE 2G     Double Module Bluetooth   BLEBluetooth 4.0 standard, support for android, ios cellphone connection     Bluetooth 2.1 + EDR standard     NFC Communication   Realizing close range (shorter than 10cm) automatic pair between receiver and controller (controller equipped NFC wireless communication module needed)     WIFI   9     Standard   802.11 b/g standard     WIFI Hotspot   The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control and moditor receiver     WIFI data link   To work as the datalink that receiver is able to broadcast and receive differential data via WIFI     Data storage   8GB SSD internal storage     Support external USB storage and automatical cycle storage     Changeable record interval, up to 5OHz raw data collection     Data Format   Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 3.0, RTCM 3.1, RTCM 3.2     GPS output data format: NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF     Network model support: VRS, FKP, MAC, fully support NTRIP protocol     Inertial sensing system   Tilt survey (optional) <sup>[2]</sup> Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle		
Double Module Bluetooth     BLEBluetooth 4.0 standard, support for android, ios cellphone connection       Bluetooth 2.1 + EDR standard     Realizing close range (shorter than 10cm) automatic pair between receiver and controller       (controller equipped NFC wireless communication module needed)     WIFI       Standard     802.11 b/g standard       WIFI     Interval       Standard     802.11 b/g standard       WIFI Hotspot     The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control       and moditor receiver     To work as the datalink that receiver is able to broadcast and receive differential data via WIFI       Data storage     8GB SSD internal storage       Support external USB storage and automatical cycle storage       Changeable record interval, up to 50Hz raw data collection       Data Format     Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 3.0, RTCM 3.1, RTCM 3.2       GPS output data format: NMEA 0183, PIK plane coordinates, Binary code, Trimble GSOF       Network model support: VRS, FKP, MAC, fully support NTRIP protocol       Inertial sensing system       Tilt survey (optional) <sup>[2]</sup>		
Bluetooth 2.1 + EDR standard     NFC Communication     Realizing close range (shorter than 10cm) automatic pair between receiver and controller     (controller equipped NFC wireless communication module needed)     WIFI     Standard     802.11 b/g standard     WIFI hotspot     The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control and moditor receiver     WIFI data link     Data storage/Transmission     Data Storage     8GB SSD internal storage     Support external USB storage and automatical cycle storage     Changeable record interval, up to 50Hz raw data collection     Data Transmission     USB data transmission, supporting FTP/HTTP data download     Data Format   Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 3.0, RTCM 3.1, RTCM 3.2     GPS output data format: NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF     Network model support: VRS, FKP, MAC, fully support NTRIP protocol     Inertial sensing system     Tilt survey (optional) <sup>[2]</sup>		
NFC Communication   Realizing close range (shorter than 10cm) automatic pair between receiver and controller (controller equipped NFC wireless communication module needed)     WIFI   Standard   802.11 b/g standard     Standard   802.11 b/g standard   moditor receiver     WIFI Hotspot   The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control and moditor receiver     WIFI data link   To work as the datalink that receiver is able to broadcast and receive differential data via WIFI     Data storage/Transmission   Data Storage     Support external USB storage and automatical cycle storage     Changeable record interval, up to 50Hz raw data collection     Data Transmission   USB data transmission, supporting FTP/HTTP data download     Data Format   Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2     GPS output data format:   NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF     Network model support:   VRS, FKP, MAC, fully support NTRIP protocol     Inertial sensing system   Tilt survey (optional) <sup>[2]</sup> Tilt survey (optional) <sup>[2]</sup> Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle		
WIFI   WIFI     Standard   802.11 b/g standard     WIFI Hotspot   The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control     and moditor receiver   and moditor receiver     WIFI data link   To work as the datalink that receiver is able to broadcast and receive differential data via WIFI     Data storage/ Transmission   Data Storage     8GB SSD internal storage   8GB SSD internal storage     Support external USB storage and automatical cycle storage   Changeable record interval, up to 50Hz raw data collection     Data Transmission   USB data transmission, supporting FTP/HTTP data download     Data Format   Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 3.0, RTCM 3.1, RTCM 3.2     GPS output data format: NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF   Network model support: VRS, FKP, MAC, fully support NTRIP protocol     Inertial sensing system   Tilt survey (optional) <sup>[2]</sup> Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle	NEC Communication	
WIFI   Standard     Standard   802.11 b/g standard     WIFI Hotspot   The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control     and moditor receiver   and moditor receiver     WIFI data link   To work as the datalink that receiver is able to broadcast and receive differential data via WIFI     Data storage/Transmission   Data storage     Bat Storage   8GB SSD internal storage     Support external USB storage and automatical cycle storage   Changeable record interval, up to 50Hz raw data collection     Data Transmission   USB data transmission, supporting FTP/HTTP data download     Data Format   Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 3.0, RTCM 3.1, RTCM 3.2     GPS output data format: NMEA 0183, PIK plane coordinates, Binary code, Trimble GSOF     Network model support: VRS, FKP, MAC, fully support NTRIP protocol     Inertial sensing system     Tilt survey (optional) <sup>[2]</sup> Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle	Neccommunication	
Standard   802.11 b/g standard     WIFI Hotspot   The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control and moditor receiver     WIFI data link   To work as the datalink that receiver is able to broadcast and receive differential data via WIFI     Data storage/ Transmission   Data Storage     8GB SSD internal storage   Support external USB storage and automatical cycle storage     Changeable record interval, up to 50Hz raw data collection   USB data transmission, supporting FTP/HTTP data download     Data Format   Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 3.0, RTCM 3.1, RTCM 3.2     GPS output data format: NMEA 0183, PIK plane coordinates, Binary code, Trimble GSOF     Network model support: VRS, FKP, MAC, fully support NTRIP protocol     Inertial sensing system     Tilt survey (optional) <sup>[2]</sup> Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle	WIE	
WIFI Hotspot   The WIFI hotspot allows any mobile terminal to connect and access to the internal webserver for the control     and moditor receiver   and moditor receiver     WIFI data link   To work as the datalink that receiver is able to broadcast and receive differential data via WIFI     Data storage/ Transmission   Data Storage     Base SSD internal storage   8GB SSD internal storage and automatical cycle storage     Changeable record interval, up to 50Hz raw data collection   Changeable record interval, up to 50Hz raw data collection     Data Format   Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 3.0, RTCM 3.0, RTCM 3.1, RTCM 3.2     GPS output data format: NMEA 0183, PIK plane coordinates, Binary code, Trimble GSOF   Network model support: VRS, FKP, MAC, fully support NTRIP protocol     Inertial sensing system   Tilt survey (optional) <sup>[2]</sup> Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle		802 11 h/e standard
and moditor receiver     WIFI data link   To work as the datalink that receiver is able to broadcast and receive differential data via WIFI     Data storage/Transmission   Image: Comparison of the storage     Bata Storage   8GB SSD internal storage     Support external USB storage and automatical cycle storage     Changeable record interval, up to 50Hz raw data collection     Data Transmission     USB data transmission, supporting FTP/HTTP data download     Data Format     Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 3.0, RTCM 3.1, RTCM 3.2     GPS output data format: NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF     Network model support: VRS, FKP, MAC, fully support NTRIP protocol     Inertial sensing system     Tilt survey (optional) <sup>[2]</sup> Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle		The WIFL hotspot allows any mobile terminal to connect and access to the internal webserver for the control
WIFI data link   To work as the datalink that receiver is able to broadcast and receive differential data via WIFI     Data storage/Transmission   Bata Storage     Bata Storage   8GB SSD internal storage     Support external USB storage and automatical cycle storage   Changeable record interval, up to 50Hz raw data collection     Data Transmission   USB data transmission, supporting FTP/HTTP data download     Data Format   Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 3.0, RTCM 3.0, RTCM 3.1, RTCM 3.2     GPS output data format: NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF     Network model support: VRS, FKP, MAC, fully support NTRIP protocol     Inertial sensing system     Tilt survey (optional) <sup>[2]</sup>		
Data storage/Transmission       Data storage     8GB SSD internal storage       Support external USB storage and automatical cycle storage     Changeable record interval, up to 50Hz raw data collection       Data Transmission     USB data transmission, supporting FTP/HTTP data download       Data Format     Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 3.0, RTCM 3.1, RTCM 3.2       GPS output data format: NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF       Network model support: VRS, FKP, MAC, fully support NTRIP protocol       Inertial sensing system       Tilt survey (optional) <sup>[2]</sup>	WIEL data link	
Data Storage     8GB SSD internal storage       Support external USB storage and automatical cycle storage     Changeable record interval, up to 50Hz raw data collection       Data Transmission     USB data transmission, supporting FTP/HTTP data download       Data Format     Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2       GPS output data format: NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF       Network model support: VRS, FKP, MAC, fully support NTRIP protocol       Inertial sensing system       Tilt survey (optional) <sup>[2]</sup> Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle		To work as the datamik that recenter is use to broadcast and recente american add the with
Support external USB storage and automatical cycle storage       Changeable record interval, up to 50Hz raw data collection       Data Transmission     USB data transmission, supporting FTP/HTTP data download       Data Format     Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2       GPS output data format: NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF       Network model support: VRS, FKP, MAC, fully support NTRIP protocol       Inertial sensing system       Tilt survey (optional) <sup>[2]</sup> Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle		8GB SSD internal storage
Changeable record interval, up to 50Hz raw data collection     Data Transmission   USB data transmission, supporting FTP/HTTP data download     Data Format   Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2     GPS output data format: NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF     Network model support: VRS, FKP, MAC, fully support NTRIP protocol     Inertial sensing system     Tilt survey (optional) <sup>[2]</sup> Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle		
Data Transmission     USB data transmission, supporting FTP/HTTP data download       Data Format     Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2       GPS output data format:     NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF       Network model support:     VRS, FKP, MAC, fully support NTRIP protocol       Inertial sensing system     Tilt survey (optional) <sup>[2]</sup> Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle		
Data Format     Differential data format: CMR+, SCMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2       GPS output data format: NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF       Network model support: VRS, FKP, MAC, fully support NTRIP protocol       Inertial sensing system       Tilt survey (optional) <sup>[2]</sup> Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle	Data Transmission	
GPS output data format:     NMEA 0183, PJK plane coordinates, Binary code, Trimble GSOF       Network model support:     VRS, FKP, MAC, fully support NTRIP protocol       Inertial sensing system     Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle		
Network model support:     VRS, FKP, MAC, fully support NTRIP protocol       Inertial sensing system     Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle		
Inertial sensing system       Tilt survey (optional) <sup>[2]</sup> Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle		
Tilt survey (optional) <sup>[2]</sup> Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle	Inertial sensing system	
		Built-in tilt compensator, correcting coordinates automatically according to the tilt direction and angle
of the centering roo		of the centering rod
Electronic bubble (optional) <sup>[3]</sup> Controller software display electronic bubble, checking leveling status of the centering rod real time	Electronic bubble (optional) <sup>[3]</sup>	
Thermometer     Built-in thermometer sensors, adopting intelligent temperature control technology which can mornitor and		
adjust the temperature of receiver in real time		
		· · ·

The OEM board with 555 channels reserves the function of tracking L-Band from TerraStar, it requires a subscription to TerraStar data service.
Tilt sensor is not the standard configuration on new Galaxy G1.
Bonding with tilt sensor, electronic bubble also is an option for new Galaxy G1.

## SOUTH SURVEYING & MAPPING TECHNOLOGY CO., LTD.

Add: South Geo-information Industrial Park, No. 39 Si Cheng Road, Tian He IBD, Guangzhou 510663, China Tel: +86-20-23380888 Fax: +86-20-23380800 Target yoursuccess E-mail: mail@southsurvey.com export@southsurvey.com impexp@southsurvey.com gnss@southsurvey.com http://www.southinstrument.com







# - Innovative GNSS Receiver -

Behind every significant epoch-making change in human societ always accompanied by the birth of an important technology.

Computer and electronics make surveying and mapping industry achieve a spa from the analog age to the digital age

And the dev lopment of Internet technology further opens the prelude surveying and mapping information age

In the form of the ubig ating and fusi

# **KEY FEATURES**



#### **GNSS** features

The new G1 has more options for GNSS board selection, and all of them own the ability of tracking most signals from all kinds of running satellite constellations. And this compact device is allowed to enable and disable tracking the constellations.

#### Bluetooth

Equipped with dual-mode Bluetooth v4.0 standard which is able to connect the other smart devices and compatible with Bluetooth v2.1 standard. It not only enlarges the work range but also makes the data communication become more stable.

#### NFC

A light touch can be successfully paired which makes the connection become faster and more convenient.



#### Tilt survey

The internal tilt sensor helps receiver to survey without centering, in order to improve survey efficiency, and tilt angle can reach 30 degree maximum.

#### Temperature control technology

Built-in sensitive thermometer sensors can monitor the temperature of each integrated modules in real time and then adjust it to make sure the receiver is in a best status.



# **OPTIMIZING**

Easy-to-use of SIM slot The new design of SIM card slot avoid inserting wrong place, and it is easy to insert and take out the SIM card.

Stable TNC radio interface The more stable TNC interface is adopted for radio antenna to instead the flimsy SMA interface.





# **UPGRADES**

### Intelligent platform

Linux OS

New generation of embedded Linux operating system platform improves RTK performance and work efficiency. Its operating efficiency is higher; a unique core processing mechanism which can respond to more than one command at one time; it starts faster and more responsive in real time.



Web UI management platform

#### Advanced WiFi technology

Adopting the advanced wifi technology as datalink which improves the measurement result, at the meantime, the wifi AP hotspot function makes any smart terminals can connect to the receiver to control it.



### Excellent network modem

The new G1 is equipped with the up-to-date 4G module which supports TDD-LTE/FDD-LTE 4G network, and is downward compatible with 3G like WCDMA/CDMA2000 and GPRS/EDGE 2G network, it brings high-speed of communication with reference station.

#### Built-in functional digital radio

SOUTH self-developed digital radio which can fully support the communications with the mainstream radio protocols: Trimtalk450S, TrimMark3, PCC EOT, and SOUTH. Realize the random switching of the radio range 410MHZ-470MHZ and the power level as well. And the radio module achieved approval CE and FCC certifications.

Radio repeater: The rover can broadcast the corrections via internal radio to other rovers after received the radio differential signal.

Internet repeater: The rover can broadcast the corrections via internet to other rovers after received the network differential signal.

Internal 8GB SSD and it supports external USB storage. Supports STH, RINEX raw data storage and the sample rate can reach to 50Hz. Supports automatic data storage cycle, the data will be automatically deleted when the space is not enough.







Embedded Web UI management platform supports WIFI and USB mode connection. Users can monitor the receiver status and configure it via the internal Web UI management platform.





# Intelligent storage technology