





























GNSS RTK RECEIVER

Update January 2023															
															
MODEL	S900+	VIVA GS18 T	Zenith60 LTE-UHF-IMU	HiPer VR	GRX3	R12i	SP85	E500 - U	i83	iRTK4	G7	K7X	T7	Quasar R93i	
CHANNELS	1408	555	226	226	226	672	600	1408	1408	800	1598	1760	1598	1598	
BOARD	UM980	NOV OEM719	NOV OEM719	TOP Vanguard	TOP Vanguard	TRI BD982	TRI	UM980	UM980	UM980	MK-803	MK-803	MK-803	MK-803	
SATELLITE SIGNALS TRACKED	GPS	L1/L2/L5	L1/L2/L5	L1/L2/L5	L1/L2/L5	L1/L2/L5	L1/L2/L5	L1/L2/L5	L1/L2/L5	L1/L2/L5	L1/L2/L5	L1/L2/L5	L1/L2/L5	L1/L2/L5	L1/L2/L5
	GLONASS	L1/L2	L1/L2/L3	L1/L2/L3	L1/L2/L3	L1/L2/L3	L1/L2/L3	L1/L2	L1/L2	L1/L2/L3	L1/L2/L3	L1/L2/L3	L1/L2/L3	L1/L2/L3	L1/L2/L3
	BEIDOU	B1/B2/B3	B1/B2/B3	B1/B2/B3	B1/B2/B3	B1/B2/B3	B1/B2/B3	B1/B2/B3	B1/B2/B3	B1/B2/B3	B1/B2/B3	B1/B2/B3	B1/B2/B3	B1/B2/B3	B1/B2/B3
	GALILEO	E1/ESA/ESB/E6	E1/ESA/ESB/E6	E1/ESA/ESB/E6	E1/ESA/ESB/E6	E1/ESA/ESB/E6	E1/ESA/ESB/E6	E1/ESA/ESB/E6	E1/ESA/ESB/E6	E1/ESA/ESB/E6	E1/ESA/ESB/E6	E1/ESA/ESB/E6	E1/ESA/ESB/E6	E1/ESA/ESB/E6	E1/ESA/ESB/E6
	QZSS	L1/L2C/L5	L1/L2C/L5	L1/L2C/L5	L1/L2C/L5	L1/L2C/L5	L1/L2C/L5	L1/L2C/L5	L1/L2C/L5	L1/L2C/L5	L1/L2C/L5	L1/L2C/L5	L1/L2C/L5	L1/L2C/L5	L1/L2C/L5
	L-BAND	B2b PPP	TerraStar	TerraStar	RTX	RTX	RTX	RTX	B2b PPP	B2b PPP	Hi-RTP	NO	NO	NO	NO
IRNSS	NO	L5	L5	L5	L5	L5	L5	NO	NO	L5	L5	L5	L5	L5	
SBAS	V	V	V	V	V	V	V	V	V	V	V	V	V	V	
ACCURACY	Static H	2.5mm ± 0.1 ppm	3mm ± 0.1 ppm	3mm ± 0.1 ppm	3mm ± 0.4 ppm	3mm ± 0.4 ppm	3mm ± 0.1 ppm	3mm ± 0.1 ppm	3mm ± 1 ppm	2.5mm ± 0.5 ppm	2.5mm ± 0.1 ppm	3mm ± 0.1 ppm	3mm ± 0.1 ppm	2.5mm ± 0.5 ppm	2.5mm ± 0.5 ppm
	Static V	3.5mm ± 0.4 ppm	3.5mm ± 0.4 ppm	3.5mm ± 0.4 ppm	5mm ± 0.5 ppm	5mm ± 0.5 ppm	3.5mm ± 0.4 ppm	3.5mm ± 0.4 ppm	5mm ± 1 ppm	5mm ± 0.5 ppm	3.5mm ± 0.4 ppm	3mm ± 0.4 ppm	3.5mm ± 0.4 ppm	5mm ± 0.5 ppm	5mm ± 0.5 ppm
	RTK H	5mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	5mm ± 0.5 ppm	5mm ± 0.5 ppm	8mm ± 0.5 ppm	8mm ± 0.5 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm
	RTK V	10mm ± 1 ppm	15mm ± 0.5 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 0.5 ppm	15mm ± 0.5 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm
RATE HZ	20	20	20	20	20	20	20	20	20	10	20	20	20	20	20
MEMORY	8Gb	8Gb	8Gb	8Gb	8Gb	8Gb	8Gb	8Gb	8Gb	8Gb	8Gb	8Gb	8Gb	8Gb	8Gb
BLUETOOTH	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
WIFI	V	NO	NO	NO	NO	NO	NO	NO	NO	V	V	V	V	V	V
WEB USER INTERFACE	V	NO	NO	NO	NO	NO	NO	NO	NO	V	V	V	V	V	V
OS Linux	V	NO	NO	NO	NO	NO	NO	NO	NO	V	V	V	V	V	V
RADIO INTEGRATED 410 - 470 MHz	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
RADIO INTEGRATED 902.4 - 928 MHz	V	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
GSM INTEGRATED	4G	4G	4G	4G	4G	4G	4G	4G	4G	4G	4G	4G	4G	4G	4G
DISPLAY INTEGRATED	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NFC	NO	NO	NO	NO	NO	NO	NO	NO	NO	V	V	V	V	V	V
IMU	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
MAX TILT OPERATION	±60°	±30°	±60°	±15°	±15°	±30°	NO	±60°	±60°	±60°	±60°	±60°	±60°	±60°	±60°
PORT FOR EXTERNAL ANTENNA	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
IPPS	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BATTERY CHANGE	V	V	V	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BATTERY CAPACITY (mAh)	3400	2800	3400	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
OPERATING TIME (HOURS) STD BATTERY	12	11	11	10	10	10	12	12	12	10	12	12	12	12	12
NR. BATTERY	2	1	2	1	1	1	2	1	1	1	1	1	1	1	1
HOT SWAP	V	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
MATERIAL	Magnesium	Magnesium	Magnesium	Magnesium	Magnesium	Magnesium	Plastic	Magnesium	Magnesium	Magnesium	Magnesium	Magnesium	Magnesium	Magnesium	Magnesium
Dimensions (mm)	157 x 76	173 x 173 x 109	167 x 75	150 x 150 x 100	150 x 150 x 100	119 x 136	222 x 195 x 75	148 x 75	156 x 77	156 x 77	135 x 135 x 85	156 x 78	135 x 135 x 85	135 x 135 x 85	
WEIGHT	1190g	1200g	1200g	1150g	1150g	1150g	1177g	1000g	1150g	1150g	970g	970g	970g	970g	
IP	67	66/68	68	67	67	67	67	67	67	68	67	68	67	68	
MIL	NO	V	V	NO	NO	NO	V	NO	NO	NO	V	V	V	V	
OPERATING TEMPERATURE	-40° + 65°	-40° + 65°	-40° + 65°	-40° + 65°	-40° + 65°	-40° + 65°	-40° + 65°	-40° + 65°	-40° + 65°	-40° + 65°	-30° + 70°	-30° + 65°	-30° + 70°	-45° + 70°	-45° + 75°
CONTROLLER	Win Mobile	NO	CS20	NO	SHC-500	NO	Ranger 3	NO	NO	NO	NO	NO	NO	NO	NO
	Win 10	SRT10W	CS35	NO	FC-6000 FT-100	SHC-6000	TSC7 T7 T10	Ranger 7 ST10	NO	NO	NO	NO	HR842	NO	NO
	Android	UT12P UT32/S70 SH5A	NO	ZeniusX Zenius800	NO	NO	NO	T41	UT12P UT32 P8II	HCE600 LT700	iHandS5	H6 H8	H6	H6	H6
SOFTWARE	Win Mobile	NO	Captive	NO	Magnet	GeoPro Field	NO	Survey Pro Fast Survey	FieldGenius SurVCE	NO	NO	NO	NO	NO	NO
	Win 10	FieldGenius	Captive	NO	Magnet	GeoPro Field	ACCESS	Survey Pro	FieldGenius SurVCE	NO	NO	NO	NO	NO	NO
SOFTWARE POST PROCESSING	Android	Cube-a FieldGenius	NO	X-PAD	NO	GeoPro Field	NO	Survey Mobile	SurPad	LandStar8	Hi-Survey Road	SurvX	SurvX K Survey	Smart RTK	SurvX
	Android	Cube-manager-p	LGO	X-PAD Fusion	Magnet Tools	Magnet Office	TBC	SPSO	GEOsolution	CGO2	HBC	SGO	GEO	SGO	Geo Office
PRESENTATION	2023	2017	2021	2018	2019	2018	2019	2020	2020	2022	2020	2022	2022	2022	2022

Legend ■ Competitor is worst ■ Competitor is better