



























GNSS FOR REFERENCE STATION

															
UPDATE AUGUST 2019															
CHANNELS		SC2280	NET-G5	GNRS	GR-30	GR-50	Alloy	Nei90 Ti-1	AsteRx-U	SP90m	NET S9	N72	VNet8	M300 Pro	
SIGNALS TRACKING	GPS	L1/L2/L2C/L5	L1/L2/L2C/L5	L1/L2/L2C/L5	L1/L2/L2C/L5	L1/L2/L2C/L5	L1/L2/L2C/L5	L1/L2/L2C/L5	L1/L2/L2C/L5	L1/L2/L2C/L5	L1/L2/L2C/L5	L1/L2/L2C/L5	L1/L2/L2C/L5	L1/L2/L2C/L5	L1/L2/L2C/L5
	GLONASS	L1/L2/L2C/L3	L1/L2/L2C/L3	L1/L2/L2C/L3	L1/L2/L2C/L3	L1/L2/L2C/L3	L1/L2/L2C/L3	L1/L2/L2C/L3	L1/L2/L2C/L3	L1/L2/L2C/L3	L1/L2/L2C/L3	L1/L2/L2C/L3	L1/L2/L2C/L3	L1/L2/L2C/L3	L1/L2/L2C/L3
	BEIDOU	B1/B2/B3	B1/B2	B1/B2	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/ESAIRBOC/E6	E1/ESA/ESB/ESAIRBOC/E6	E1/ESA/ESB/ESAIRBOC/E6	E1/ESA/ESB/ESAIRBOC/E6	E1/ESA/ESB/ESAIRBOC/E6	E1/ESA/ESB/ESAIRBOC/E6	E1/ESA/ESB/ESAIRBOC/E6	E1/ESA/ESB/ESAIRBOC	E1/ESA/ESB/ESAIRBOC/E6	E1/ESA/ESB/ESAIRBOC/E6	E1/ESA/ESB/ESAIRBOC	E1/ESA/ESB/ESAIRBOC	E1/ESA/ESB/ESAIRBOC/E6	E1/ESA/ESB
	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
ACCURACY	Static H	3mm ± 0.1 ppm	3mm ± 0.1 ppm	3mm ± 0.1 ppm	2.5mm ± 0.1 ppm	2.5mm ± 0.1 ppm	3mm ± 0.1 ppm	3mm ± 0.1 ppm	3mm ± 0.1 ppm	3mm ± 0.1 ppm	2.5mm ± 0.5 ppm	2.5mm ± 0.5 ppm	2.5mm ± 0.1 ppm	2mm ± 0.5 ppm	
	Static V	3.5mm ± 0.4 ppm	3.5mm ± 0.4 ppm	3.5mm ± 0.4 ppm	0.5mm ± 0.4 ppm	0.5mm ± 0.4 ppm	3.5mm ± 0.4 ppm	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	4mm ± 0.5 ppm	
	RTK H	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	8mm ± 1 ppm	
	RTK V	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	15mm ± 1 ppm	
	RATE HZ	5(20Hz, 50Hz, 100Hz optional)	100	100	50	50	100	50	100	Optional	Optional	Optional	Optional	Optional	50Hz
RADIO INTEGRATED		NO	NO	Optional	NO	Optional	NO	NO	Optional	Optional	NO	NO	NO	NO	NO
GSM INTEGRATED		NO	NO	Optional	NO	Optional	NO	NO	Optional	Optional	NO	NO	NO	NO	NO
EMBEDDED OPERATING SYSTEM		LINUX	LINUX	LINUX	NO	NO	NO	NO	NO	LINUX	NO	NO	LINUX	LINUX	LINUX
MEMORY		32 GB	32 GB	32 GB	8 GB SD	32 GB SD	24 GB	8 GB	8 GB	8 GB	32 GB	32 GB	64 GB	32 GB	32 GB
EXTERNAL MEMORY		NO LIMIT	NO LIMIT	NO LIMIT	NO	NO	1 TB	1 TB	NO LIMIT	NO LIMIT	1 TB	1 TB	1 TB	1 TB	1 TB
STORAGE	PROPRIETARY FORMAT	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	RINEX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	RINEX COMPRESSED	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	KMZ	NO	NO	NO	NO	NO	✓	✓	NO	NO	NO	NO	NO	NO	NO
	BINEX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SUBDIVISION MEMORY		5	5	5	12	12	12	12	12	12	12	12	12	12	12
SIMULTANEOUS SESSIONS		5	5	5	12	12	12	12	12	12	12	12	12	12	12
DISPLAY		✓	NO	NO	NO	NO	✓	✓	NO	✓	✓	✓	✓	✓	✓
POWER CONSUMPTION		4.5W	5.0 W	5.0 W	3.5 W	3.1 W	3.8 W	3.8 W	7 W	5.9 W	3.8 W	3.5 W	3.5 W	3.5 W	
VOLTAGE		9-28V	9-28V	9-28V	10.5-28V	10.5-28V	9.5-28V	9.5-28V	9.5-28V	9.5-28V	9.5-28V	9.5-28V	9.5-28V	9.5-28V	9.5-28V
INTEGRATED BATTERY		20 hours	✓	✓	NO	24 hours	15 hours	15 hours	NO	6 hours	15 hours	15 hours	20 hours	16 hours	
POWER PORT		1	2	2	2	2	2	2	NO	NO	3	3	1	1	
CONNECTIONS	SERIAL	2	3	3	1	2	4	3	3	3	1	3	3	2	
	USB	1	1	1	1	2	1	1	3	1	1	1	1	1	
	WiFi	✓	✓	✓	NO	✓	✓	NO	✓	✓	✓	✓	✓	✓	
	BLUETOOTH	✓	✓	✓	NO	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	ETHERNET	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
EMAIL ALERT		✓	NO	NO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
INPUT-OUTPUT	PPS OUTPUT	✓	✓	✓	NO	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	EVENT INPUT	✓	✓	✓	NO	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	OSC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	SENSOR SUPPORT	✓	✓	✓	✓	✓	✓	✓	✓	NO	NO	NO	✓	✓	
	NR PORT	10	5	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETHERNET	DHCP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	AUTHENTICATION	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	HTTPS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	FTP PUSH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
NTRIP	CLIENT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	CASTER	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	SERVER	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
WEB USER INTERFACE		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
PROXY SUPPORT		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
WEIGHT		2kg	2 kg	2 kg	1.67 kg	2 kg	1.75 kg	1.75 kg	1.5 kg	1.7 kg	2.28 kg	2.10 kg	2.5kg	2.4kg	
IP		67	67	67	67	67	68	67	67	67	68	68	68	67	
OPERATING TEMPERATURE		-40° + 65°	-40° + 80° no battery -30° + 65° internal battery	-40° + 80° no battery -30° + 65° internal battery	-40° + 65°	-40° + 65°	-40° + 65°	-40° + 65°	-30° + 65°	-40° + 65°	-40° + 80°	-40° + 65°	-40° + 75°	-40° + 80°	
ANTENNA	ANTENNA CONNECTOR	TNC	T	T	TNC	TNC	TNC	TNC	TNC	TNC	TNC	TNC	TNC	TNC	
	CHOKE RING	SA1800 - SA1500	CR-G5 - PN-AS	CR-G5 - PN-AS	AR25 - AR20	AR25 - AR20	GNSS - TI - v2	GNSS - TI	PolaNt	CHOKE RING	CR3	C220GR	A220GR	AT500 - AT350	
	GEODETIC	A45	G5-A1	SA-300	AR-10	AR-10	ZEPHYR GEODETIC 3	ZEPHYR GEODETIC 2	PolaNt-x	SPGA	CR3	CR3	CR3	AT330	
SOFTWARE NETWORK		Cube-net	TOPNet	TOPNet	SPIDERNET	SPIDERNET	VR3Net	VR3Net	Geo++	VR3Net	CRNet	CRNet	CRNet	CDC.Net	
PRESENTATION		2019	2014	2015	2016	2016	2018	2013	2017	2017	2017	2016	2018	2016	