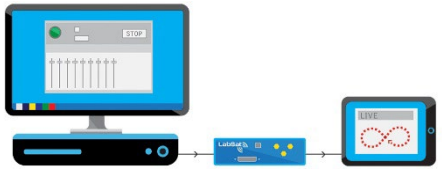
LabSat

LabSat 3

LabSat 3 Wideband



LabSat Real-Time

	LabSat 3	LabSat 3 Wideband	LabSat Real-Time
Constellations	GPS L1 Galileo E1 GLONASS G1 BeiDou B1	GPS L1, L2, L5; Galileo E1, E5a/b, E6; GLONASS L1, L2, L3; BeiDou B1, B2, B3; QZSS L1, L2, L5; NavIC L5 & S-Band; In-band SBAS Further signals in the upper and lower L band can be configured with the internal webserver. Bespoke requirements like Iridium & Sirius XM radio frequencies are available on request	GPS L1 Galileo E1 GLONASS G1 BeiDou B1
RF Channels	1, 2 or 3 (model dependant)	3	2
RF Centre Frequency	GPS L1 & Galileo E1 - 1575.420 MHz GLONASS G1 - 1602.00 MHz BeiDou B1 - 1561.098 MHz	User Selectable	GPS L1 & Galileo E1 - 1575.420 MHz GLONASS G1 - 1602.00 MHz BeiDou B1 - 1561.098 MHz
Bandwidth	9.66 MHz	10 MHz, 30 MHz, 56 MHz	16 MHz
Quantisation	1 bit, 2 bit	1 bit, 2 bit, 3 bit	1 bit, 2 bit
Sample Frequency	16.368 MHz	10.23 MHz, 30.69 MHz, 58 MHz	16.368 MHz
Removable Battery	Yes	Yes	No
Output Signal Level	Adjustable -73 dBm to -103 dBm	-73dBm/MHz @ 0dB Variable attenuator provides between +20 dB and -69 dB of adjustment during replay	Fixed -83dBm Ability to vary the C/No levels for all or individual satellites during simulation
Reference Oscillator	Accuracy (ppm) TCXO ± 2.5; OCXO ± 0.3 Aging (ppm/year) TCXO ±1; OCXO ± 0.3 Stability (ppm/ °C) TCXO ±0.05; OCXO ± 0.05	Temperature Stability (ppm) TCXO ± 0.05; OCXO ± 0.05 Frequency Stability (ppm over first year) TCXO ± 1; OCXO ± 0.3	Temperature Stability (ppm) TCXO ±0.05; OCXO ±0.01 (optional) Frequency Stability (ppm) TCXO ±2.5; OCXO ±0.05 (optional)
Operating Voltage	8 - 30 V DC	8 - 30 V DC	8 - 30 V DC
Dimensions	167 x 128 x 43 (mm)	167 x 128 x 46 (mm)	170 x 128 x 46 (mm)
Weight	960 g with battery (910 g without)	1.2 kg	750 g

Last update: 18/01/2023