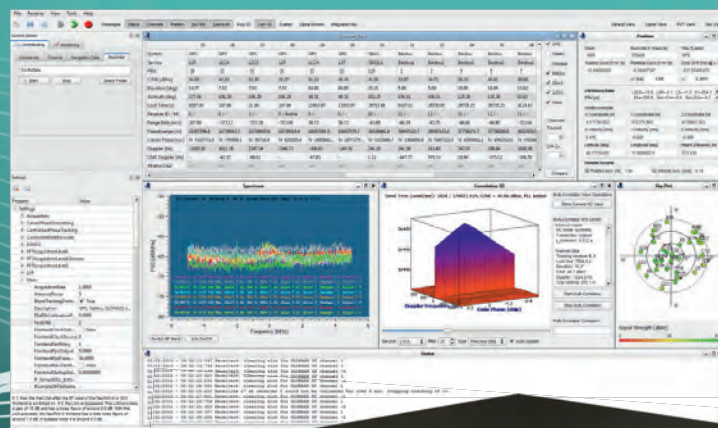


SX3

GNSS R&D Software Receiver Portfolio

2023



IFEN

Specification

2023

SX3 Platform Type	SX3-SF (Silver Edition)	SX3-DF (Black Edition)
RF Front-End	1 RF-in 4 RF bands with L- & S-band RF bandwidth 50 MHz	2 RF-in 4 RF bands (2 bands per RF-in), L- & S-band RF bandwidth 50 MHz
Processing unit	Notebook or 19" workstation with Windows 10 OS	
Signal IF sample rates (bandwidth)	Selectable: 5, 10 (standard), 20, 25, 50, 100 MSamples	
Signal channels	Depending on selected processing modes and options Reference station mode: up to 150 real-time tracking channels , GPU based signal acquisition Configurable multi-correlator setup (for signal quality monitoring, scintillation,..)	
GNSS signals	Galileo E1, E5ab, E6 GPS L1 CA & L1C, L2P & L2C, L5 BeiDou-2 B1I, B2I, BeiDou-3 B1C, B2a, B3I GLONASS L1, L2 IRNSS L5 + S QZSS L1, L2, L5 SBAS L1	
Signal processing	Real-time Processing, Post-Processing (IF samples from file) Scalar tracking, Vector tracking	Real-time Processing, Post-Processing (IF samples from file) Scalar tracking, Vector tracking, Heading
Code accuracy	< 20 cm (typical)	
Carrier accuracy	< 1 mm	
TTF	< 1 s (with position and ephemeris), < 10 s (with ephemeris), < 55 s cold start	
Measurement Rate	up to 25 Hz	
Measurement Latency	< 70 ms	
Acquisition sensitivity	19 dBHz	
Tracking sensitivity	10 dBHz	
API	Baseband API, Navigation API, Sensor API, IF Sample API, Assistance API (for integrating own processing algorithms)	
Output formats	RINEX, NMEA and proprietary ASCII logs	
Interfaces from RFFE to computer	USB 3.0	
External connectors	10 MHz in/out, 1-pps out, 1 trigger-in	
Active antenna support	5 V / 150 mA per antenna	
Integrated sensors, external sensors	Barometer (internal), interface to Xsens IMU, interface to WLAN	
Operating limits	600 m/s velocity (higher speed limits for space applications available on request) 18.000 m height	
Temperature (operating)	-40° C to + 85° C	
Enclosures		



Disclaimer:
All specifications subject to change without prior notice

For Americas
IFEN Inc.
+1 415 627 0971
sales-us@ifen.com



For EMEA & APAC
IFEN GmbH
+49 8121 2238 20
sales@ifen.com