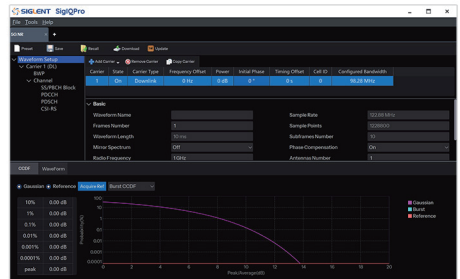


A COMPREHENSIVE TESTING SOLUTION

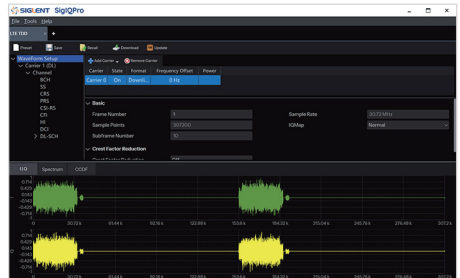
|| 5G NR

- Strictly compliant with 3GPP 5G NR specifications for 5G NR FR1/FR2-1/FR2-2 bands
- Integrates 3GPP-standard NR Reference Measurement Channels (RMC), Fixed Reference Channels (FRC), and Test Model parameter presets
- Supports NTN (Non-Terrestrial Network) test mode presets compliant with 3GPP NR-NTN specifications, including RMC/FRC/Test Model configurations
- Enables parameter configurations for single-carrier and multi-carrier signals
- Generates complex scenario signals with phase noise, frequency offset, and other parameters for real channel emulation
- Supports multi-channel configurations for downlink PDCCH/PUSCH/CSI-RS and uplink PUCCH/PUSCH/SRS, including PRACH and downlink SS/BPCH Block channels
- Allows .arb file and .sta file export for rapid user-defined parameter presets and signal demodulation



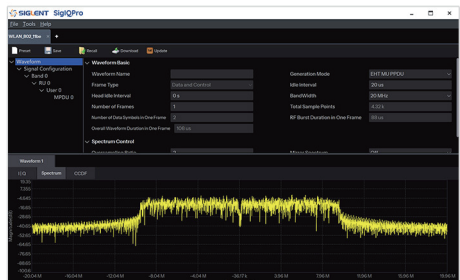
|| LTE/LTE-A FDD/TDD

- Supports generation and download signals compliant with 3GPP LTE and LTE-A specifications
- Supports predefined E-UTRA Test Model (E-TM) configurations
- Supports predefined PUCCH test model configurations
- Supports predefined Fixed Reference Channel (FRC) configurations
- Supports predefined Reference Measurement Channel (RMC) configurations
- Enables .arb file and .sta file export for rapid user-defined parameter presets and signal demodulation



|| WLAN 802.11 b/g/a/n/ac/ax/be

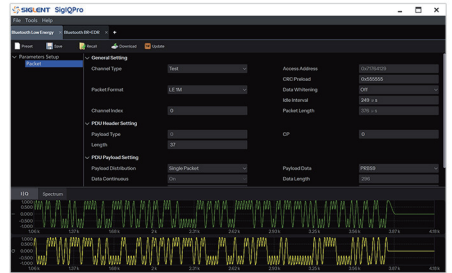
- Strictly compliant with IEEE 802.11 b/a/g/n/ac/ax/be standards, generating high-precision reference signals with rigorous validation and performance optimization
- Supports flexible OFDMA Resource Unit (RU) configurations, dynamically allocating 26/52/106/242/484/996-tone RU types to adapt to multi-user scenarios and fragmented spectrum requirements
- Supports 20/40/80/160/320 MHz bandwidths and non-contiguous channel aggregation, compatible with 20 MHz subchannel puncturing for maximum spectrum utilization efficiency
- Supports BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, and 4096QAM modulation schemes, as well as Dual Carrier Modulation (DCM), enhancing single-stream rates and anti-interference capabilities
- Supports BCC (Binary Convolutional Code) and LDPC (Low-Density Parity-Check Code) with coding rates ranging from 1/2 to 5/6





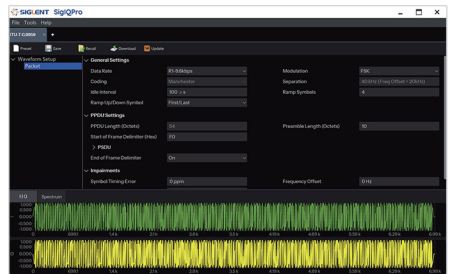
Bluetooth

- Generate BR (Basic Rate), EDR (Enhanced Data Rate) and LE (Low Energy) standard signals
- Support multiple transmission modes (SCO, eSCO, ACL, etc.) and packet types (2-DHx/2-EVx, 3-DHx/3-EVx), including LE 1M/2M/ Coded packet formats
- Highly customizable frame header and payload content
- Provides multiple impairment simulation features including fixed frequency offset, clock error, and frequency drift



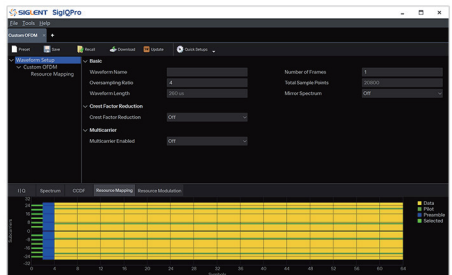
IoT

- Generate IEEE-compliant standard signals for 802.15.4 SUN FSK, 802.15.4 SUN OFDM, and 802.15.4 OQPSK/BPSK (Zigbee)
- Generate IEEE-compliant standard signals for 802.15.4 HRP UWB
- Generate ITU-T G.9959-compliant FSK/GFSK (Z-Wave) signals
- Highly customizable frame header and payload content
- Provides impairment simulation features including fixed frequency offset and clock error



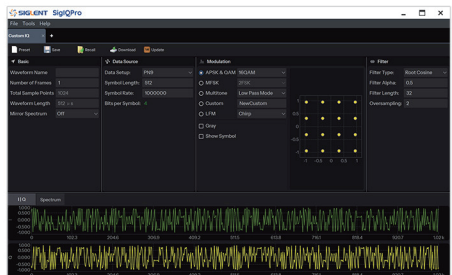
Custom OFDM

- Quickly establish customized modulation configurations for IEEE 802.11a-1999, LTE Downlink
- Customizable time-frequency resource mapping and transmission payload bit sequences
- Support for spectrum and power control through configurable baseband filters, peak clipping, and window functions



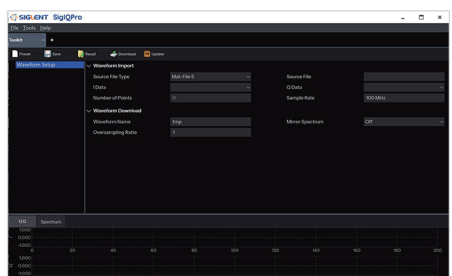
Custom IQ

- Digital modulated signal generation based on custom bit sequences
- Modulation Format:
2ASK, PR-ASK, 2FSK, 4FSK to 16FSK, MSK, 8QAM, 16QAM to 4096QAM, BPSK, OQPSK, QPSK, 8PSK, DBPSK, DQPSK, D8PSK, PI/4-DQPSK, PI/8-D8PSK, 16APSK, 32APSK



Toolkit

- A file conversion tool, compatible with conversion of various data formats
- Export waveform files (*.arb), project file (*.project) or state files (*.state)
- Import SIGLENT encrypted waveforms (*.arb) or user defined waveforms (*.txt/.csv/.dat, *.mat, *.project, *.state, etc)



COMPATIBLE INSTRUMENTS

SSG6082A-V Series Multi-Protocol Ultra-Wideband Vector Signal Gen

SSG6082A-V delivers output frequencies up to 8 GHz with 1 GHz RF modulation bandwidth. Featuring phase noise as low as -132 dBc/Hz, it provides excellent in-band response and ACPR performance. Supporting vector mode S-parameter compensation and real-time IQ baseband AWGN capability, it accommodates various scenarios including MIMO.



SDG7000A Series 1 GHz, 5 GSa/s Dual-Channel AWG

SDG7000A dual-channel arbitrary waveform generator delivers up to 1 GHz output frequency, supporting 5 GSa/s sampling rate and 14-bit resolution. It generates 2.5 GSa/s arbitrary waves and 500 MSymbol/s vector signals, integrating CW, pulse, PRBS patterns, and 16-bit bus output to meet diverse test requirements.



SSG5000X-V Series 6 GHz RF, 150 MHz Baseband

SSG5000X-V is SIGLENT's first vector signal generator supporting 6 GHz RF output and 150 MHz internal baseband source bandwidth. Designed for RF testing and wireless device functional validation, it provides efficient and reliable verification solutions for general-purpose electronic equipment and IoT devices.



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