Transcom Instruments
Product Brochure

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T3267E Bench-top Vector Signal Generator

Overview

T3267E Series Bench-top Vector Signal Generator has excellent radio frequency performance and rich signal generating function. It can provide arbitrary wave, continuous wave signal, general vector signal, analog and digital modulation signal, vector signal satisfying wireless communication standard, signal satisfying broadcasting standard and so on. It is suitable for R&D, production and testing in teaching, wireless monitoring, mobile communication, aerospace, national defense and military industry, as well as electronic countermeasures in the field of security. Based on high performance platform, it can satisfy most of the signal simulation requirements and provide customized signal services.

T3267E is applicable to research and development, production testing, and electronic countermeasures in various fields such as teaching, wireless monitoring, mobile communication, aerospace, national defense and military industry, etc. It based on the high-performance platform and can meet most of the signal simulation requirements and provide customized signal services.

Key Facts

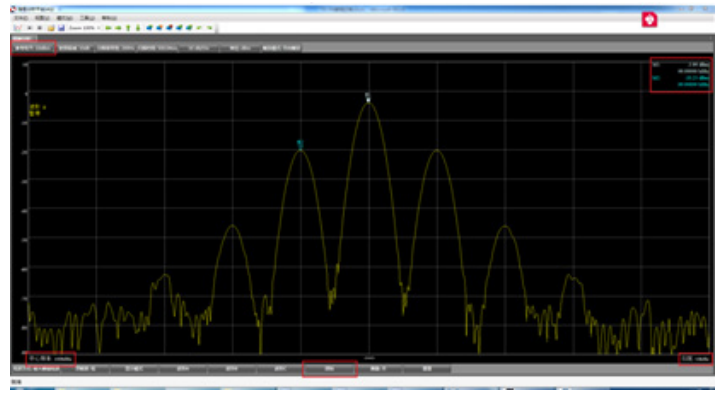
- Broadband Frequency Coverage：10MHz ~ 6GHz；
- High dynamic power coverage：-110 ~ +14dBm；
- Wide Bandwidth I/Q Modulation;
- Full-mode communication standard signal：GSM/EDGE/TD-SCDMA/WCDMA/TD-LTE/FDD-LTE/NB-IoT/LoRa/5GNR；
- Abundant general digital modulation：BPSk/QPSk/OQPSk/8PSk/16QAM/32QAM/64QAM/128QAM/256QAM/MSk/FSk，and output linear/logarithmic scanning，users can configure different modulation modes and symbol rates;
- Pulse modulation function;
- Analog Modulation Function: AM/PM/FM；

Functions & Applications

Signal modulation

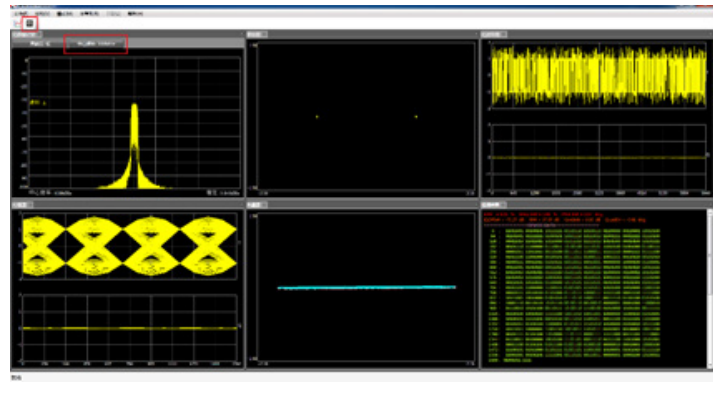
- **Analog modulation**

Analog modulation is to transmit information to change some characteristics of periodic or intermittent signals. T3267E can generate analog signals such as AM \ FM \ PM.



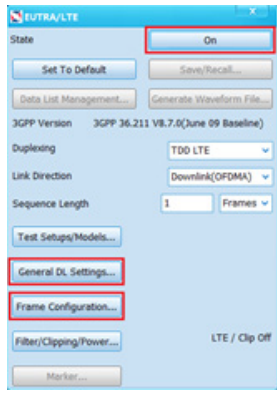
- **Digital modulation**

Digital modulation is an important method of modern communication, which has better anti-interference ability and security. T3267E can output a variety of digital modulation signals.



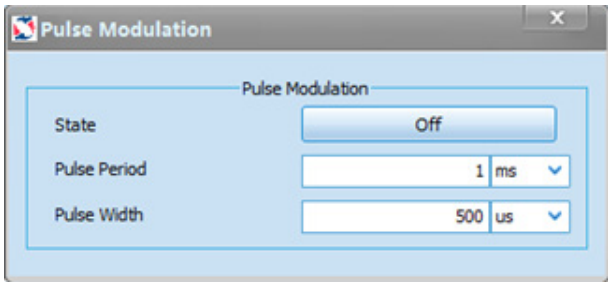
- **Standard communication system modulation**

The wireless communication standard system has a standard physical layer structure. T3267E can generate various standard system signals according to the standard.



- **Pulse modulation**

The pulse modulation interface is shown in the picture, the period and pulse width can be configured.

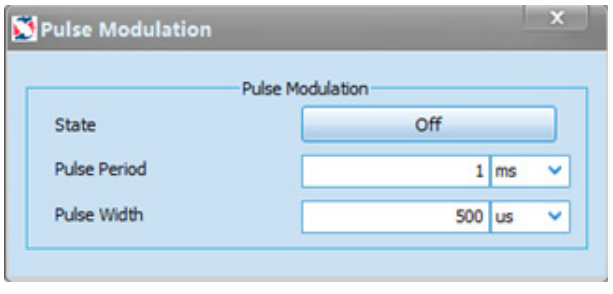


- **Sweep mode**

In this function, engineers can configure parameters such as start and stop frequency, frequency stepping, sweep power, and scan speed.

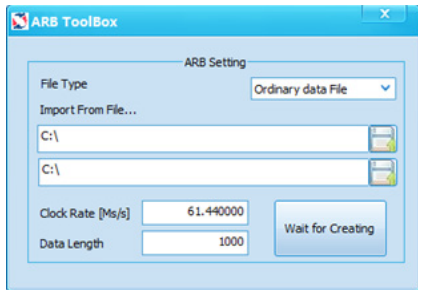
- **Good phase noise**

The phase noise is an important index to evaluate the signal source, which refers to the signal at the center frequency offset of 10kHz. The phase noise of T3267E is - 110dbc.



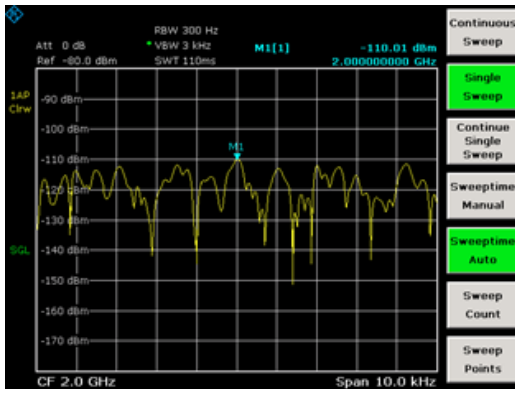
- **ARB function**

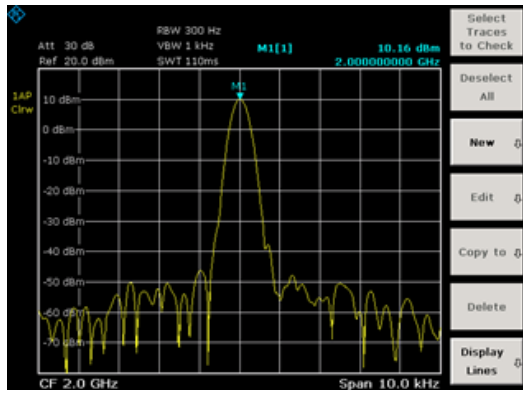
ARB function allows users to transmit customized baseband data. Supports IQ data in .txt and .mat formats. Users need to set the data length and signal sampling rate according to the IQ data file.



- **Dynamic Range**

The dynamic range of the signal source is the power difference between the maximum and minimum signals that can be output. The dynamic range of the G6 is as large as -110dBm ～ +14dBm





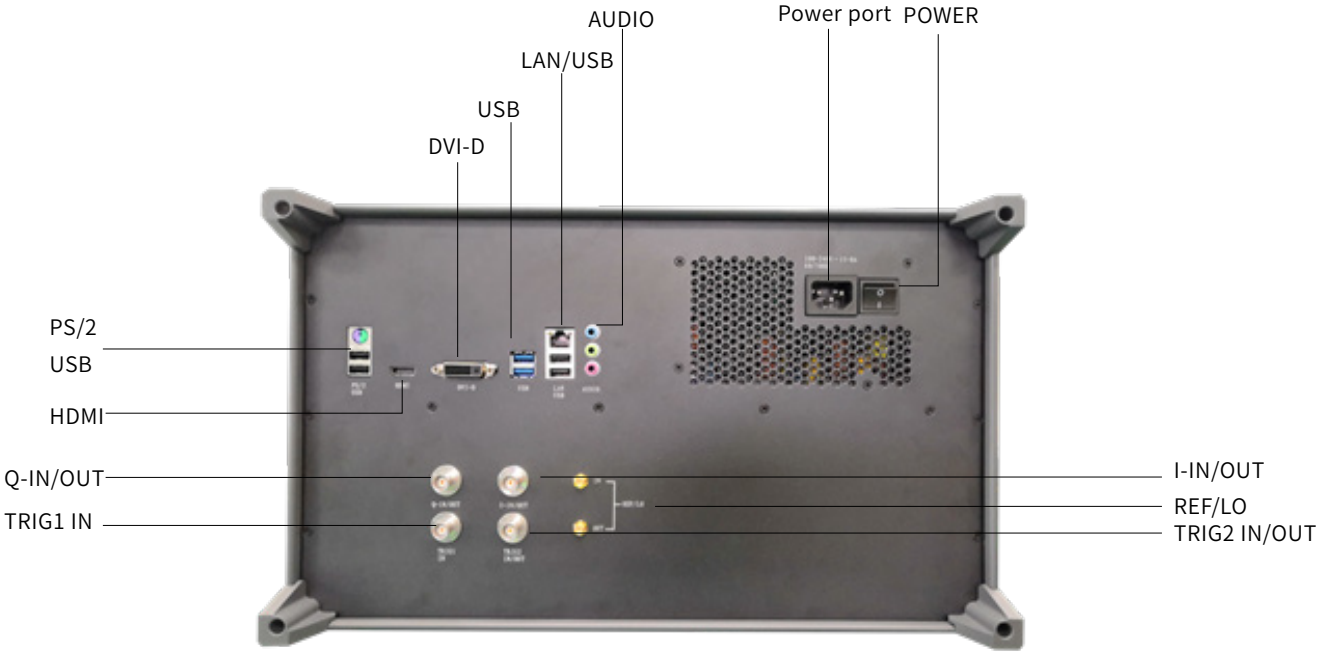
Typical Application

- Laboratory RF test
- Manufacturing application test
- Teaching application test

Innovative features

- UWB modulation bandwidth
- Support external reference
- Function can be customized

Control Elements



T3267E

Specification

T3267E technical index	
Frequency range	10MHz ~6000MHz
Frequency step	0.1Hz
Frequency temperature stability	±1ppm @0~50°C
Initial frequency accuracy	±0.5ppm
Power range	-110 to +14dBm
Power step	0.1dB
Power accuracy	±0.75dB@Lev>=-80dBm,; ±1.5dB@Lev<-80dBm
Harmonic	⩽ -30dBc（+10dBm）
Nonharmonic	⩽ -50dBc
Phase noise	⩽ -105dBc/Hz@10kHz(3-6GHz); ⩽ -109dBc/Hz@10kHz(⩽ 3GHz)
Modulation bandwidth	20MHz（support upgrade to 100MHz）
Modulation mode	I/Q, pulse
Pulse modulation parameter	Period：10us~40s，Width：10ns~40s
General digital modulation	BPSK、QPSK、OQPSK、8PSk、MSK、FSK、16QAM、32QAM、64QAM、128QAM、256QAM
Analog modulation	AM、FM、PM、DSB、USB、LSB
Mobile communication system	GSM/EDGE/CDMA/TD-SCDMA/WCDMA/CDMA2000/TD-LTE/FDD-LTE/NB-IoT/LoRa
Support channel (LTE)	PSS、SSS、PSS、SSS、CSRS、PBCH、PCFICH、PHICH、PDCCH、PDSCH、PUSCH、PUCCH、PRACH and SRS
EVM	⩽ 2%rms
Frequency error	Better than ±10Hz
Phase error	Better than ±3°
TOI	+15dBm (–10dBm，1MHz interval，sensitivity low，reference level –10 dBm)
Reference output	10MHz，frequency error±20Hz，power -9dBm
Wave quality ρ	>0.9999
API	Support secondary development（open API）
Mechanical Features	
Operation system	windows10，windows7
Connection port	RF output：N type，female，50 Ω USB port：USB type-C
Operation environment	Operation temperature： 0° C to 50° C Storage temperature： -20° C to 70° C
Dimension	456mm*434mm*271mm
Weight	15kg

Ordering List

Model	Description
T3267E	Bench-top Vector Signal Generator
Accessory	
MTX-AS001	Power adapter
MTX-AS002	Data cable
Option	
MTX-S001	GSM License
MTX-S002	WCDMA License
MTX-S003	TDD-LTE License
MTX-S004	FDD-LTE License
MTX-S005	NB-IoT License
MTX-S006	LoRa License
MTX-S007	TD-SCDMA License
MTX-S008	Custom Digital Modulation License
MTX-S009	ARB License
MTX-S010	Pulse Modulation License
MTX-S011	Analog Modulation License
MTX-S012	Sweep Mode License
MTX-S013	LSB\USB\Two Tone License
MTX-S014	5GNR License

Keep innovating for excellence!

About us

Transcom Instrument Co., Ltd. founded in 2005 and headquartered in Shanghai, is a leading manufacturer and provider of RF and wireless communication testing instruments and overall solutions in China. Based on its independent brands and a wide range of core patented technologies, Transcom became national high-tech enterprise with independent intelligent property rights and has been listed into Shanghai Enterprise Recognition Award for High Growth SMEs in Technology.

Transcom is backed by a experienced and dedicated research team in mobile communication, radio frequency and microwave, and network optimization testing instrument. Through "Industry-University-Research" cooperation with universities, Transcom founded Southeast University-Transcom Electronic Measurement Technology Center at Southeast University to futher ensure technology and talent reserve, and secure future visionary and sustainable technology development.

Transcom's product portfolios focus 4 areas: cellular network critical communication planning/maintenance/optimization, Manufacturing testing solution, educational instrument/ equipment, spectrum monitoring sensor for system integration.

ISO14001

ISO9001

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Company Profile