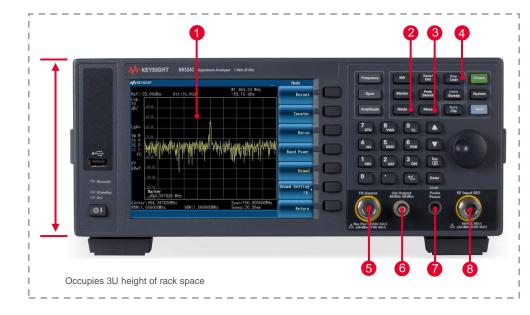
# N932xC Basic Spectrum Analyzer (BSA)

## Outperform expectations in your essential applications



- 1. 6.5" TFT color display with multiple language UI
- 2. Multiple measurement modes: Spectrum analyzer (default), tracking generator, reflection measurement\*, modulation analysis, and power meter mode
- 3. One button power suite: channel power, OBW, ACPR, SEM, channel scanner and spectrogram
- 4. User key for quick access to 18 frequently-used measurement configurations
- 5. Tracking generator (including a built-in VSWR bridge\*)
- 6. 40 MHz calibration output
- 7. Probe power
- 8. RF input, 50 Ω

#### Reliable performance to micorwave frequency range

- Frequency covers from 9 kHz to 4/7 GHz or 1 MHz to 13.6/20 GHz, with up to ± 0.1 ppm annual aging rate, reducing frequency drift for more accurate measurements
- Typical –162 dBm DANL allows to view low-level signals easily and clearly
- Typical ± 0.3 absolute amplitude accuracy provides you with greater confidence in power measurement results

# Value-added capabilities help you gain more insight during RF design and troubleshooting

- Tracking generator with built-in VSWR bridge, supports transmission and reflection measurements <sup>1</sup>
- Demodulation mode allows you to gain more insight easily and costeffectively into AM/FM and ASK/FSK signal analysis
- Supports Keysight U2000 Series and U2020 X-Series USB power sensors for precision power measurement
- Built-in DC input channel for AM/FM in-band, on-channel measurement, and xDSL measurement from 9 kHz to 10 MHz<sup>1</sup>

#### Minimized learning curve enhances productivity

- User-definable softkeys provide quick access to 18 frequently used measurement setups, helping you easily switch from one task to another
- Task planner makes testing fast and easy by automating testing using pre-defined test routines
- SCPI commands compatible with Keysight ESA Spectrum Analyzer Series



<sup>1.</sup> VSWR bridge, reflection measurement, DC input channel are supported by N9321 and N9322C

### Key specifications

	N9321C	N9322C	N9323C	N9324C			
Frequency range	9 kHz – 4 GHz	9 kHz – 7 GHz	1 MHz – 13.6 GHz	1 MHz – 20 GHz			
Reference aging rate	± 1 ppm, ± 0.1 ppm (w/Opt. PFR)						
Absolute amplitude accuracy	± 0.3 dB						
Displayed average noise level, 1 GHz (typical)	-162 dBm/Hz	-162 dBm/Hz	-154 dBm/Hz	-154 dBm/Hz			
Resolution bandwidth	10 Hz – 3 MHz						
Third-Order Intercept (TOI)	+11 dBm	+11 dBm	+9 dBm	+9 dBm			
Input attenuator	0 to 50 dB, in 1 dB steps	0 to 50 dB, in 1 dB steps	0 to 50 dB, in 5 dB steps	0 to 50 dB, in 5 dB steps			
Phase noise, 100 kHz offset	-98 dBc/Hz	-98 dBc/Hz	-97 dBc/Hz	-97 dBc/Hz			

# Option information

Option	Description	N9321C	N9322C	N9323C	N9324C
P04	Preamplifier, 4 GHz	$\checkmark$			
P07	Preamplifier, 7 GHz		1		
P13	Preamplifier, 13.6 GHz			~	
P20	Preamplifier, 20 GHz				~
TG4	Tracking generator, 4 GHz	$\checkmark$			
TG7	Tracking generator, 7 GHz		$\checkmark$	~	1
RM4	Reflection measurement (requires TG4)	~			
RM7	Reflection measurement (requires TG7)		$\checkmark$		
G01	GPIB interface	$\checkmark$	$\checkmark$	~	1
AMA	AM/FM demodulation analysis	~	$\checkmark$	~	~
DMA	ASK/FSK demodulation analysis	$\checkmark$	1	~	1
TMG	Gated sweep	√	1	V	~
TPN	Task planner	$\checkmark$	1	~	1
SEC	Security features	$\checkmark$	1	~	1
MNT	Signal monitor with spectrogram	V	$\checkmark$	V	~
SCN	Channel scanner	~	$\checkmark$	~	~
PWM	U2000 Series power sensor support	~	$\checkmark$	~	~
PWP	U2020 X-series power sensor support	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
BB1	Baseband input	~	$\checkmark$		
PFR	Precision frequency reference	~	$\checkmark$	~	~

# Measurement features





Channel scanner

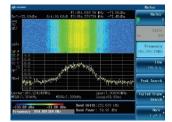
Task planner

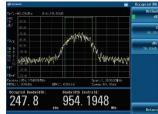
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Deviation: FSK Error: Hag Error:	25,28 MHz 1,34 N 1,66 N	25.34 kHz 2.35 % 2.14 %	24.99 kHz 0.97 % 0.22 %	
Carrier Power: Devlation: FSK Error: Hag Error: Carr Freq Offset:	25,28 MHz 1,34 N 1,66 N	25.34 kHz 2.35 %	24.99 kHz 0.97 %	

FM demodulation analysis

FSK demodulation analysis





Spectrogram

# Learn more at: www.keysight.com

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Power suite - Occupied bandwidth