

# Signal Seamless Capture in SSC mode



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# DSA700Series Spectrum Analyzer

**RIGOL** TECHNOLOGIES, INC.

## **Advantages and Characteristics**

- All-Digital IF Technology
- Frequency Range from 100 kHz up to 1 GHz
- Min. -130 dBm Displayed Average Noise Level (Typ.)
- Min. -80 dBc/Hz @ 10 kHz Offset Phase Noise
- Level Measurement Uncertainty <1.5 dB</li>
- 100 Hz Minimum Resolution Bandwidth
- 2FSK modulation signal measurement and analysis function in SSC mode
- Optional EMI pre-compliance test function

- EMI Filter & Quasi-Peak Detector Kit (Opt.)
- Advanced Measurement Functions (Opt.)
- Optional RF TX/RX Training Kit
- Optional RF Accessories (Cable, Adaptor, Attenuator ...)
- Complete Connectivity: LAN (LXI), USB Host & Device, GPIB (Opt.)
- 8 Inch TFT LCD Display
- Compact Size, Light Weight Design

#### **Brief Technical Parameters**

Frequency				
		DSA705	DSA710	
Frequency range		100 kHz to 500 MHz	100 kHz to 1 GHz	
Frequency resolution		1 Hz		
SSB Phase No	oise			
		DSA705	DSA710	
		20 $^{\circ}$ to 30 $^{\circ}$ ,f_e=500 MHz	20 ℃ to 30 ℃ ,f <sub>c</sub> =1 GHz	
Carrier offset	10 kHz	<-80 dBc/Hz		
	100 kHz	<-100 dBc/Hz (typ.)		
Amplitude Mea	surement F	Range		
Range	/	f <sub>c</sub> ≥ 10 MHz		
		DANL to +20 dBm		
Displayed Ave	rage Noise	Level (DANL) (Normalized to 1Hz)		
		DSA705	DSA710	
		attenuation = 0 dB, RBW = VBW = 100 Hz, sample of 1Hz, 20 $^{\circ}$ to 30 $^{\circ}$ , input impendence = 50 $^{\circ}$	detector, trace average ≥ 50, normalized to	
PA OFF		<-110 dBm (typ.)	<-110 dBm (typ.)	
PA ON		<-130 dBm (typ.)	<-130 dBm (typ.)	
Distortion			'	
	/	DSA705	DSA710	
Second harmonic intercept (SHI)		f <sub>c</sub> ≥ 50 MHz, input signal level = -20 dBm, attenuation = 10 dB		
		+40 dBm		
Third-order intercept (TOI)		$f_c \ge 50$ MHz, two -20 dBm tones at input mixer spaced by 200 kHz, attenuation = 10 dB		
		+10 dBm		
Signal Seamle	ss Capture	(SSC—Opt.)		
Measurement bandwidth		202 kHz		
Measurement speed		650 spectrums/s		

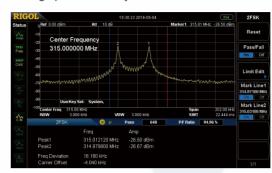
# **Advantages and Characteristics**

- Measurement for Remote controller, car keys and other signals based on 2FSK modulation
- The mass production requirements for testing and monitoring of the spectral signals
- EMI pre-compliance testing
- Channel power monitoring and pass/fail verifications.
- Measurement requirements for electronics fans of spectrum analyzer
- Applicable to RF industrial region, such as R&D, lower cost manufacture industry, etc.
- Combined with Microwave & RF education and training kit; applicable to RF education field; get to deeply understand the theories by practical operations

# **Design Features**

Measurement for Remote controller, car keys and other signals based on 2FSK modulation,

Not only retains the stable and integration of digital spectrum analyzer, but also the ripid capture characteristic of anolog spectrum analyzer.



It is the most cost-effective EMI pre-compatibility testing tool. The built-in testing function of the tool can help engineers to quickly locate the problems of the products being measured, enabling the products to pass the testing conducted by EMC



# **Price and Application Solutions**

Please contact the RIGOL Regional Sales Manager for further information

## **Ordering Information**

	Description	Order Number
Model	spectrum analyzer, 100 kHz to 500 MHz (with preamplifier)	DSA705
	spectrum analyzer, 100 kHz to 1 GHz (with preamplifier)	DSA710
Standard	quick guide (hard copy)	-
accessories	power cable	-
Options	EMI filter & quasi-peak detector	EMI-DSA800
	advanced measurement kit	AMK-DSA800
	DSA PC software	Ultra Spectrum
	signal seamless capture	SSC-DSA
Optional accessories	include: N-SMA cable, BNC-BNC cable, N-BNC adaptor, N-SMA adaptor, 75 $\Omega$ to 50 $\Omega$ adaptor, 900 MHz/1.8 GHz antenna (2pcs), 2.4 GHz antenna (2pcs)	DSA Utility Kit
	include: N(F)-N(F) adaptor (1pcs), N(M)-N(M) adaptor (1pcs), N(M)-SMA(F) adaptor (2pcs), N(M)-BNC(F) adaptor (2pcs), SMA(F)-SMA(F) adaptor (1pcs), SMA(M)-SMA(M) adaptor (1pcs), BNC T type adaptor (1pcs), 50 $\Omega$ SMA load (1pcs), 50 $\Omega$ BNC impedance adaptor (1pcs)	RF Adaptor Kit
	include: 50 $\Omega$ to 75 $\Omega$ adaptor (2pcs)	RF CATV Kit
	include: 6dB attenuator (1pcs), 10dB attenuator (2pcs)	RF Attenuator Kit
	30dB high power attenuator, max. power 100W	ATT03301H
	N(M)-N(M) RF cable	CB-NM-NM-75-L-12G
	N(M)-SMA(M) RF cable	CB-NM-SMAM-75-L-12G
	RF demo kit (transmitter)	TX1000
	RF demo kit (receiver)	RX1000
	near field probe	NFP-3
	EMI pre-compliance test software	S1210 EMI Pre- compliance Software
	rack mount kit	RM-DSA800
	soft carrying bag	BAG-G1
	USB to GPIB interface converter for instrument	USB-GPIB