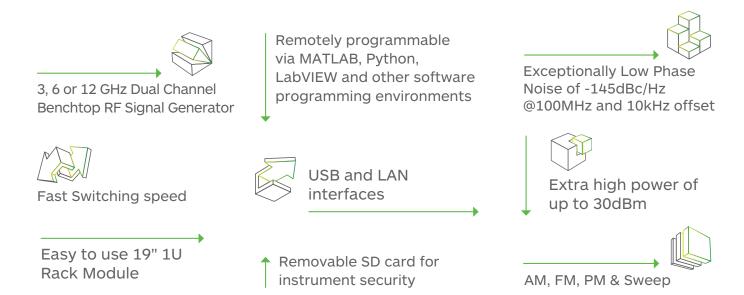


LS3082R/LS6082R/LS1292R-DST

3, 6 or 12 GHz Dual Channel Rack mount RF Signal Generator



The all-new Lucid Series Rack mount platform is designed to offer maximum channel density at minimum cost of space. This rack-mounted platform, offers up to 2 phase coherent channels in a 19" 1U box. Featuring high power, fast switching speed, superior signal integrity and purity, removable memory card for maximum security, all the necessary modulated signals for analog communication systems, with built in LAN and USB interface, the Lucid Series is designed to meet today's most demanding specifications, needed for ATE and production lines.



Signal Integrity and Purity

One of the most important requirement in today's testing and measurement applications is high signal quality. With a typical SSB phase noise of -145dBc at 100MHz, and -132dBc at 1GHz, at 10 kHz carrier offset, Tabor's All-New Lucid Series platform delivers one of the best quality signals available on the market today, answering the ever-growing demand for clear and precise signals.

High Power 30dBm

Many test applications require high power signals or they are needed to overcome losses in the test system. The Lucid RF generator offers an extended power range that can drive signals up to +30dBm. The ability to drive high power signals eliminates the need for external power amplifiers and produces high quality, accurate signals.

Modulation Schemes

Signal bursts and chirps have become common need in the daily life of any aerospace or defense application. With Tabor's All-New Lucid Series, any modulation is possible, no matter if its AM, FM, PM and Sweep.

Multiple Ways to Control the Unit

Tabor's Lucid Series comes with its own dedicated software to control the instrument functions, modes and features via a graphical user interface (GUI) as well as a complete set of drivers, allowing you to write your application in various environments including Labview, Python, CVI, C++, VB and MATLab. You may also link the supplied dll to other Windows-based API's or use low-level SCPI commands to program the instrument.



LS3081R/LS6081R/LS1291R-DST

Specifications

3, 6 or 12 GHz Dual Channel Rack mount RF Signal Generator

FREQUENCY	
Range:	
LS3082R:	9 kHz to 3GHz
LS6082R:	9 kHz to 6GHz
LS1292R:	9 kHz to 12GHz
Resolution:	0.001 Hz
Phase offset:	0.01 deg
Switching speed:	500 μs

FREQUENCY REFERENCE	
Temp. Stability:	±25 ppb max.
Aging:	± 3 ppm for 20 years
Warm up time:	30 min

AMPLITUDE	
Max output power:	
Settable:	+30 dBm
Calibrated:	+25 dBm ⁽¹⁾
Min output power:	
Settable:	-90 dBm
Calibrated:	-70 dBm
Resolution:	0.01 dB
Power Mute:	-95 dBm
Output Return Loss:	-10 dBm
Accuracy (dB):	
Up to 100MHz:	±0.3 (typ.)
100MHz to 3GHz:	±0.4 (typ.)
3GHz to 9GHz:	±0.7 (typ.)
Above 9GHz:	±1 (typ.)

PHASE NOISE (dBc/Hz)	
Measured @ 10kHz offset	
1 GHz:	-138 (typ.)
2 GHz:	-133 (typ.)
3 GHz:	-130 (typ.)
6 GHz:	-124 (typ.)
12 GHz:	-118 (typ.)
HAPMONICS (dBc)	

HARIVIONICS (GBC)	
Up to 100 MHz:	-30 dBc
100 MHz to 12 GHz:	-50 dBc ⁽²⁾
SUB-HARMONICS (dBc)	

-55 dBm

NON-HARMONI	CS (dBc)
Up to 12 GHz:	-90dBc (typ.) (3,4 -60dBc max. ⁽⁵⁾

FREQUENCY MODULATION Maximum Deviation: 10 MHz Resolution: 0.1% or 1 Hz (the greater) Modulation Rate: 1 MHz Resolution: 1 Hz AMPLITUDE MODULATION AM Depth:	MODULATION	
Resolution: 0.1% or 1 Hz (the greater) Modulation Rate: 1 MHz Resolution: 1 Hz AMPLITUDE MODULATION AM Depth:	FREQUENCY MODULATION	
Modulation Rate: 1 MHz Resolution: 1 Hz AMPLITUDE MODULATION AM Depth: Type: Linear Maximum settable: 90% Resolution: 0.1% of depth Accuracy (1 kHz) < ± 4% of setting Modulation rate: DC to 100 kHz PHASE MODULATION Peak Deviation: 360 deg Modulation Rate: DC to 100 kHz SWEEP Range: Same as freq. range Modes: Frequency and amplitude Dwell time: 10 μs to 1000 s Resolution: 1 μs Number of points: 2 to 65535 Step change: Linear Trigger: Free run, External,	Maximum Deviation:	10 MHz
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Range: Same as freq. range Modes: Frequency and amplitude Dwell time: 10 µs to 1000 s Resolution: 1 µs Number of points: 2 to 65535 Step change: Linear Trigger: Free run, External,	Modulation Rate:	DC to 100 kHz
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Dwell time: 10 μs to 1000 s Resolution: 1 μs Number of points: 2 to 65535 Step change: Linear Trigger: Free run, External,	Range:	Same as freq. range
Resolution: 1 μs Number of points: 2 to 65535 Step change: Linear Trigger: Free run, External,	Modes:	Frequency and amplitude
Number of points: 2 to 65535 Step change: Linear Trigger: Free run, External,	Dwell time:	10 μs to 1000 s
Step change: Linear Trigger: Free run, External,	Resolution:	1 μs
Trigger: Free run, External,	Number of points:	2 to 65535
I ridder.	Step change:	Linear
	Trigger:	

INPUTS	
MODULATION INPUT	
Connector Type:	BNC
Input Impedance:	50Ω
Max. input voltage:	±1V
Input damage level:	±3.5V
PULSE / TRIGGER INPUT	
Connector type:	BNC
Input Impedance:	50Ω
Input voltage:	TTL, CMOS compatible
Threshold:	1.5V
Damage level:	-0.42V or 5.42V
EXTERNAL REFERENCE INPUT	
Connector type:	BNC
Input Impedance:	50Ω
Waveform:	Sine or Square
Frequency:	10/100MHz
Power:	-3 dBm to +10 dBm
Absolute Max. Level:	+15 dBm

OUTPUTS		
RF OUT		
Impedance:	50Ω	
Connector type:	SMA	
Number of channels:	2	
REFERENCE OUT		
Impedance:	50Ω	
Connectors type:	2 x BNC	
Frequency:	10 MHz or 100 MHz	
Shape:	Sine	
Power:	3 to 7 dBm	

GENERAL	
Voltage Range:	90VAC to 264VAC
Frequency Range	47Hz to 63Hz
Power Consumption	100W
Interface:	
USB Host:	2 x front panel type A 1 x rear panel type A
USB Device:	1 x rear panel, type B
LAN:	1 x 1000/100/10 BASE-T
Storage:	Removable SD card
Dimensions (WxHxD):	450 X 43 x 500 mm
Weight:	
Without Package:	6 kg
Shipping Weight:	6.5 kg
Temperature:	
Operating:	0°C to +40°C
Storage:	-40°C to +70°C
Warm up time:	15 minutes
Humidity:	85%, non-condensing
Safety:	CE Marked, IEC61010-1:2010
EMC:	IEC 61326-1:2013
Calibration:	1 years
Warranty:	1 year

ORDERING INFORMATION	
MODEL	DESCRIPTION
LS3082R-DST	3GHz RF Dual Channel Signal Generator
LS6082R-DST	6GHz RF Dual Channel Signal Generator
LS1292R-DST	12GHz RF Dual Channel Signal Generator

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Locking Range:

6 to 12 GHz:

±2 ppm

 $^{^{(1)}}$ Above 25kHz; $^{(2)}$ 750MHz to 900MHz -35dBc (typ.); $^{(3)}$ -60dBm max. @ 1GHz, 1.5GHz, 2.5GHz and 3GHz; $^{(4)}$ -75dBm max. @ -15dBm to +15dBm and f>6GHz; $^{(5)}$ Boundary spurs which may apear @ -100MHz to +100MHz offset from CW