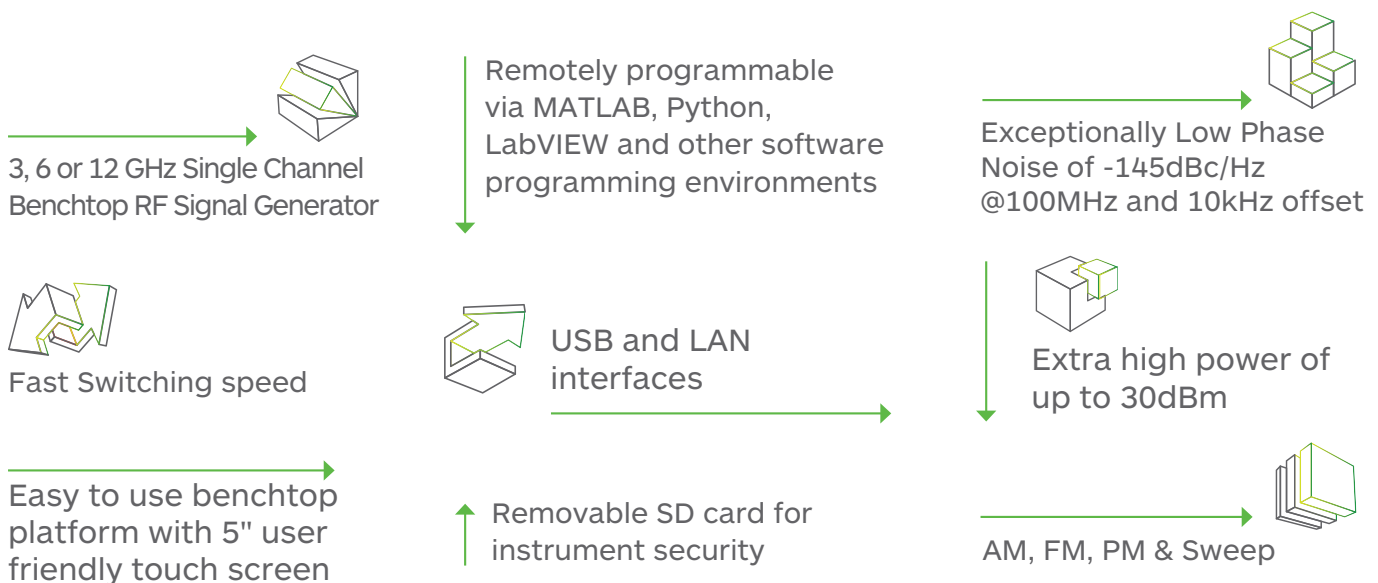


## LS3081B/LS6081B/LS1291B-DST

3, 6 or 12 GHz RF Analog Benchtop Signal Generator



The all-new Lucid Series benchtop platform offers 3, 6 and 12 GHz models in single channel. Featuring extremely 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 from the R&D benches to the 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.

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## Specifications

FREQUENCY		MODULATION		OUTPUTS	
<b>Range:</b>		<b>FREQUENCY MODULATION</b>		<b>RF OUT</b>	
LS3081B:	9 kHz to 3GHz	<b>Maximum Deviation:</b>	10 MHz	<b>Impedance:</b>	50Ω
LS6081B:	9 kHz to 6GHz	Resolution:	0.1% or 1 Hz (the greater)	<b>Connector type:</b>	SMA
LS1291B:	9 kHz to 12GHz	<b>Modulation Rate:</b>	1 MHz	<b>Number of channels:</b>	1
<b>Resolution:</b>	0.001 Hz	Resolution:	1 Hz	<b>REFERENCE OUT</b>	
<b>Phase offset:</b>	0.01 deg	<b>AMPLITUDE MODULATION</b>		<b>Impedance:</b>	50Ω
<b>Switching speed:</b>	500 μs	<b>AM Depth:</b>		<b>Connectors type:</b>	2 x BNC
<b>FREQUENCY REFERENCE</b>		Type:	Linear	<b>Frequency:</b>	10 MHz or 100 MHz
<b>Temp. Stability:</b>	±25 ppb max.	Maximum settable:	90%	<b>Shape:</b>	Sine
<b>Aging:</b>	± 3 ppm for 20 years	Resolution:	0.1% of depth	<b>Power:</b>	3 to 7 dBm
<b>Warm up time:</b>	30 min	Accuracy (1 kHz)	< ± 4% of setting	<b>GENERAL</b>	
<b>AMPLITUDE</b>		<b>Modulation rate:</b>	DC to 100 kHz	<b>Voltage Range:</b>	90VAC to 264VAC
<b>Max output power:</b>		<b>PHASE MODULATION</b>		<b>Frequency Range</b>	47Hz to 63Hz
Settable:	+30 dBm	<b>Peak Deviation:</b>	360 deg	<b>Power Consumption</b>	100W
Calibrated:	+25 dBm <sup>(1)</sup>	<b>Modulation Rate:</b>	DC to 100 kHz	<b>Display Type</b>	5", TFT capacitive touch screen
<b>Min output power:</b>		<b>SWEEP</b>		<b>Interface:</b>	
Settable:	-90 dBm	<b>Range:</b>	Same as freq. range	USB Host:	2 x front panel type A 1 x rear panel type A
Calibrated:	-70 dBm	<b>Modes:</b>	Frequency and amplitude	USB Device:	1 x rear panel, type B
<b>Resolution:</b>	0.01 dB	<b>Dwell time:</b>	10 μs to 1000 s	LAN:	1 x 1000/100/10 BASE-T
<b>Power Mute:</b>	-95 dBm	<b>Resolution:</b>	1 μs	<b>Storage:</b>	Removable SD card
<b>Output Return Loss:</b>	-10 dBm	<b>Number of points:</b>	2 to 65535	<b>Dimensions (WxHxD):</b>	315 X 88 x 425 mm
<b>Accuracy (dB):</b>		<b>Step change:</b>	Linear	<b>Weight:</b>	
Up to 100MHz:	±0.3 (typ.)	<b>Trigger:</b>	Free run, External, Bus, Timer	Without Package:	6 kg
100MHz to 3GHz:	±0.4 (typ.)	<b>INPUTS</b>		Shipping Weight:	6.5 kg
3GHz to 9GHz:	±0.7 (typ.)	<b>MODULATION INPUT</b>		<b>Temperature:</b>	
Above 9GHz:	±1 (typ.)	<b>Connector Type:</b>	BNC	Operating:	0°C to +40°C
<b>PHASE NOISE (dBc/Hz)</b>		<b>Input Impedance:</b>	50Ω	Storage:	-40°C to +70°C
<b>Measured @ 10kHz offset</b>		<b>Max. input voltage:</b>	±1V	<b>Warm up time:</b>	15 minutes
<b>1 GHz:</b>	-138 (typ.)	<b>Input damage level:</b>	±3.5V	<b>Humidity:</b>	85%, non-condensing
<b>2 GHz:</b>	-133 (typ.)	<b>PULSE / TRIGGER INPUT</b>		<b>Safety:</b>	CE Marked, IEC61010-1:2010
<b>3 GHz:</b>	-130 (typ.)	<b>Connector type:</b>	BNC	<b>EMC:</b>	IEC 61326-1:2013
<b>6 GHz:</b>	-124 (typ.)	<b>Input Impedance:</b>	50Ω	<b>Calibration:</b>	1 years
<b>12 GHz:</b>	-118 (typ.)	<b>Input voltage:</b>	TTL, CMOS compatible	<b>Warranty:</b>	1 year
<b>HARMONICS (dBc)</b>		Threshold:	1.5V	<b>ORDERING INFORMATION</b>	
<b>Up to 100 MHz:</b>	-30 dBc	<b>Damage level:</b>	-0.42V or 5.42V	<b>MODEL</b>	<b>DESCRIPTION</b>
<b>100 MHz to 12 GHz:</b>	-50 dBc <sup>(2)</sup>	<b>EXTERNAL REFERENCE INPUT</b>		LS3081B-DST	3GHz RF Analog Signal Generator
<b>SUB-HARMONICS (dBc)</b>		<b>Connector type:</b>	BNC	LS6081B-DST	6GHz RF Analog Signal Generator
<b>6 to 12 GHz:</b>	-55 dBm	<b>Input Impedance:</b>	50Ω	LS1291B-DST	12GHz RF Analog Signal Generator
<b>NON-HARMONICS (dBc)</b>		<b>Waveform:</b>	Sine or Square		
<b>Up to 12 GHz:</b>	-90dBc (typ.) <sup>(3,4)</sup> -60dBc max. <sup>(5)</sup>	<b>Frequency:</b>	10/100MHz		
		<b>Power:</b>	-3 dBm to +10 dBm		
		<b>Absolute Max. Level:</b>	+15 dBm		
		<b>Locking Range:</b>	±2 ppm		

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