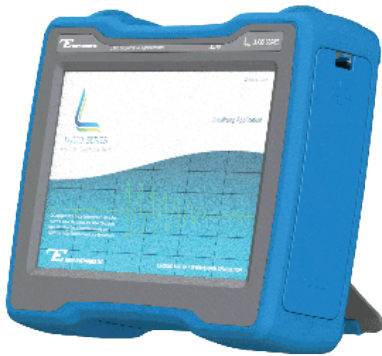
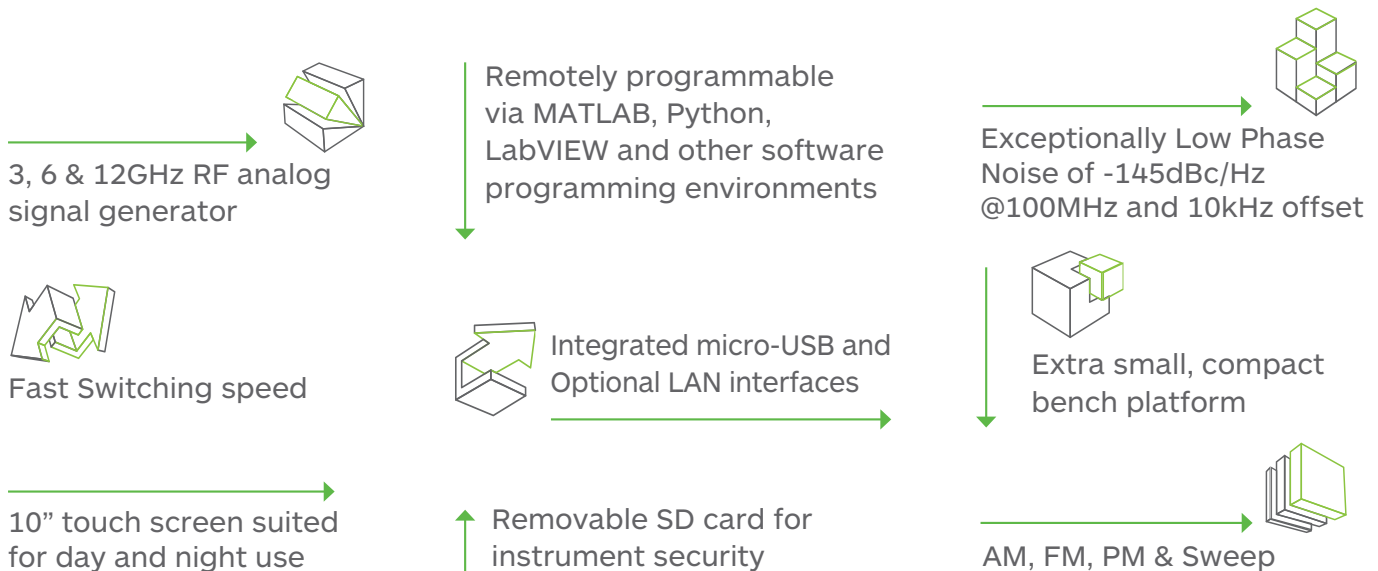


## LS3081P/LS6081P/LS1291P-DST

3, 6 or 12 GHz RF Analog Signal Generator



The all-new Lucid Series offers the most advanced features and industry leading performance in the most compact form factor. The series feature 3, 6 and 12 GHz single channel versions, all sharing the very same industry leading highlighted features, in a compact, small footprint modern tablet like design. Featuring superior signal integrity and purity, all the necessary modulated signals for analog communication systems, with built in USB, optional LAN interfaces and removable micro-SD card, the Lucid Series is designed to meet today's most demanding applications, needed from labs through 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.

### Fast Switching

In today's world, time is a crucial factor, whether in design, on the production floor or inside ATE systems. Tabor's All-New Lucid Series ensures maximum measurements at minimum time, setting the industry's highest throughput standard.

### 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	
<b>Range:</b>	
LS3081P-DST:	100 kHz to 3GHz
LS6081P-DST:	100 kHz to 6GHz
LS1291P-DST:	100 kHz to 12GHz
<b>Resolution:</b>	0.001 Hz
<b>Phase offset:</b>	0.01 deg
<b>Switching speed:</b>	500µs

FREQUENCY REFERENCE	
<b>Temp. Stability:</b>	±100 ppb,
<b>Aging:</b>	± 1.25 ppm over 10y
<b>Warm up time:</b>	30 min

INTERNAL	
<b>Output Frequency:</b>	10/100 MHz
<b>Output Wave</b>	Sine
<b>Output Power:</b>	+5 ±2 dBm
<b>Reference Mute:</b>	-60 dBm
<b>Locking Range:</b>	± 2.0 ppm
<b>Output Impedance:</b>	50Ω

EXTERNAL	
<b>Input Frequency:</b>	10 / 100 MHz
<b>Input Power:</b>	-5 to +10 dBm
<b>Max. Input Level:</b>	+15 dBm
<b>Input Impedance:</b>	50Ω
<b>Locking Range:</b>	20Hz
<b>Wave shape:</b>	Sine or Square

AMPLITUDE	
<b>Range:</b>	+15 dBm to -60dBm
<b>Resolution:</b>	0.01 dB
<b>Power Mute:</b>	-65dBm
<b>Output Return Loss:</b>	-10dBm
<b>Switching speed:</b>	500µs
<b>Accuracy (dB):</b>	±0.5 (up to 10dBm)

PHASE NOISE (dBc/Hz)	
<b>up to 1.5 GHz:</b>	-136 typ (-132 max)
<b>1.5 to 3 GHz:</b>	-130 typ (-125 max)
<b>3 to 6 GHz:</b>	-124 typ (-120 max)
<b>6 to 12 GHz:</b>	-118 typ (-114 max)

HARMONICS (dBc)	
<b>up to 12 GHz:</b>	-40dBc

NON HARMONICS (dBc)	
<b>up to 12 GHz:</b>	-60dBc

MODULATION	
COMMON CHARACTERISTICS	
<b>Carrier Frequency:</b>	Full scale
<b>Modulation Source:</b>	Internal
FREQUENCY MODULATION	
<b>Modulation Rate:</b>	1 MHz
<b>Resolution:</b>	0.1% or 1 Hz (the greater)
<b>Maximum Deviation:</b>	
0.05*f:	(< 1.5GHz)
25MHz:	(1.25 to 2.5 GHz)
50MHz:	(2.5 to 5GHz)
100MHz:	(5 to 10GHz)
200MHz:	(> 10GHz)

AMPLITUDE MODULATION	
<b>Modulation rate:</b>	DC to 100 kHz
<b>AM Depth Linear:</b>	+15 dBm
Max. Settable:	90%
Resolution:	0.1% of depth
Accuracy (1kHz):	< ± 4% of setting

AM Depth Exponential:	
Max. settable:	40 dB
Resolution:	0.01 dB
Accuracy (1kHz):	< ± 4% of setting

PHASE MODULATION	
<b>Modulation Rate:</b>	1 MHz
<b>Resolution:</b>	TBD
<b>Peak Deviation:</b>	300 rad

DIGITAL SWEEP MODE (FREQ. & AMP.)	
<b>Dwell time:</b>	10us to 1000s
<b>Resolution:</b>	1us
<b>Number of points:</b>	2 to 65535
<b>Step change:</b>	Linear or logarithmic
<b>Trigger:</b>	Continuous, External, Bus, Timer

INPUTS	
TRIGGER INPUT	
<b>Connector type:</b>	MMCX
<b>Input Impedance:</b>	50Ω or 10kΩ
<b>Input voltage:</b>	TTL, CMOS
<b>Damage level:</b>	±5V
EXTERNAL REFERENCE INPUT	
<b>Connector type:</b>	SMA
<b>Input Impedance:</b>	50Ω
<b>Waveform:</b>	Sine or Square
<b>Frequency:</b>	10/100MHz

OUTPUTS	
RF OUT	
<b>Impedance</b>	50Ω
<b>Connector type</b>	SMA
REFERENCE OUT	
<b>Impedance</b>	50Ω
<b>Connector type</b>	SMA

GENERAL	
<b>Voltage:</b>	+12.0 to +12.6 VDC
<b>Supply Voltage::</b>	+15 V DC
<b>Power Consumption:</b>	60W max. (45W typ)
<b>Interface:</b>	
USB Host:	2, type A
USB Device:	1, type B
LAN (Optional):	1, microUSB
<b>Dimensions (WxHxD):</b>	28 x 22.5 x 6.5 cm
<b>Weight:</b>	
Without Package:	3 Kg
Shipping Weight:	3.5 Kg
<b>Temperature:</b>	
Operating:	0°C to +40°C
Storage:	-40°C to +70°C
<b>Warm up time:</b>	15 minutes
<b>Humidity:</b>	85% , non-condensing
<b>Safety:</b>	CE Marked, IEC61010-1:2010
<b>EMC:</b>	IEC 61326-1:2013
<b>Calibration:</b>	1 years
<b>Warranty:</b>	1 year

ORDERING INFORMATION	
MODEL	DESCRIPTION
LS3081P-DST	3GHz RF Analog Signal Generator
LS6081P-DST	6GHz RF Analog Signal Generator
LS1291P-DST	12GHz RF Analog Signal Generator