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.



10" touch screen suited for day and night use

Removable SD card for instrument security

AM, FM, PM & Sweep

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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FREQUENCY

Range:	
LS3081P-DST:	100 kHz to 3GHz
LS6081P-DST:	100 kHz to 6GHz
LS1291P-DST:	100 kHz to 12GHz
Resolution:	0.001 Hz
Phase offset:	0.01 deg
Switching speed:	500us

FREQUENCY REFERENCE

Temp. Stability:	±100 ppb,	
Aging:	± 1.25 ppm over 10y	
Warm up time:	30 min	
INTERNAL		
Output Frequency:	10/100 MHz	
Output Wave	Sine	
Output Power:	+5 ±2 dBm	
Reference Mute:	-60 dBm	
Locking Range:	± 2.0 ppm	
Output Impedance:	50Ω	
EXTERNAL		
Input Frequency:	10 / 100 MHz	
Input Power:	-5 to +10 dBm	
Max. Input Level:	+15 dBm	
Input Impedance:	50Ω	
Locking Range:	20Hz	
Wave shape:	Sine or Square	

AMPLITUDE

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

PHASE NOISE (dBc/Hz)

up to 1.5 GHz:	-136 typ (-132 max)
1.5 to 3 GHz:	-130 typ (-125 max)
3 to 6 GHz:	-124 typ (-120 max)
6 to 12 GHz:	-118 typ (-114 max)

-40dBc

HARMONICS (dBc)

up to 12 GHz:

NON HARMONICS (dBc)

up to 12 GHz: -60dBc

MODULATIONCOMMON CHARACTERISTICSCarrier Frequency:Full scaleModulation Source:InternalFREQUENCY MODULATIONModulation Rate:1 MHz

Resolution:	0.1% or 1 Hz (the greater)		
Maximum Deviation:			
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			
Modulation rate:	DC to 100 kHz		
AM Depth Linear:	+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			
Modulation Rate:	1 MHz		
Resolution:	TBD		
Peak Deviation:	300 rad		
DIGITAL SWEEP MO	DE (FREQ. & AMP.)		
Dwell time:	10us to 1000s		
Resolution:	1us		
Number of points:	2 to 65535		
Step change:	Linear or logarithmic		
Trigger:	Continious, External, Bus, Timer		

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

OUTPUTS	
RF OUT	
Impedance	50Ω
Connector type	SMA
REFERENCE OUT	
Impedance	50Ω
Connector type	SMA
-	
GENERAL	
Voltage:	+12.0 to +12.6 VDC
Supply Voltage::	+15 V DC
Power Consumption:	60W max. (45W typ)
Interface:	
USB Host:	2, type A
USB Device:	1, type B
LAN (Optional):	1, microUSB
Dimensions (WxHxD):	28 x 22.5 x 6.5 cm
Weight:	
Without Package:	3 Kg
Shipping Weight:	3.5 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,
IEC61010-1:2010EMC:IEC 61326-1:2013Calibration:1 yearsWarranty: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