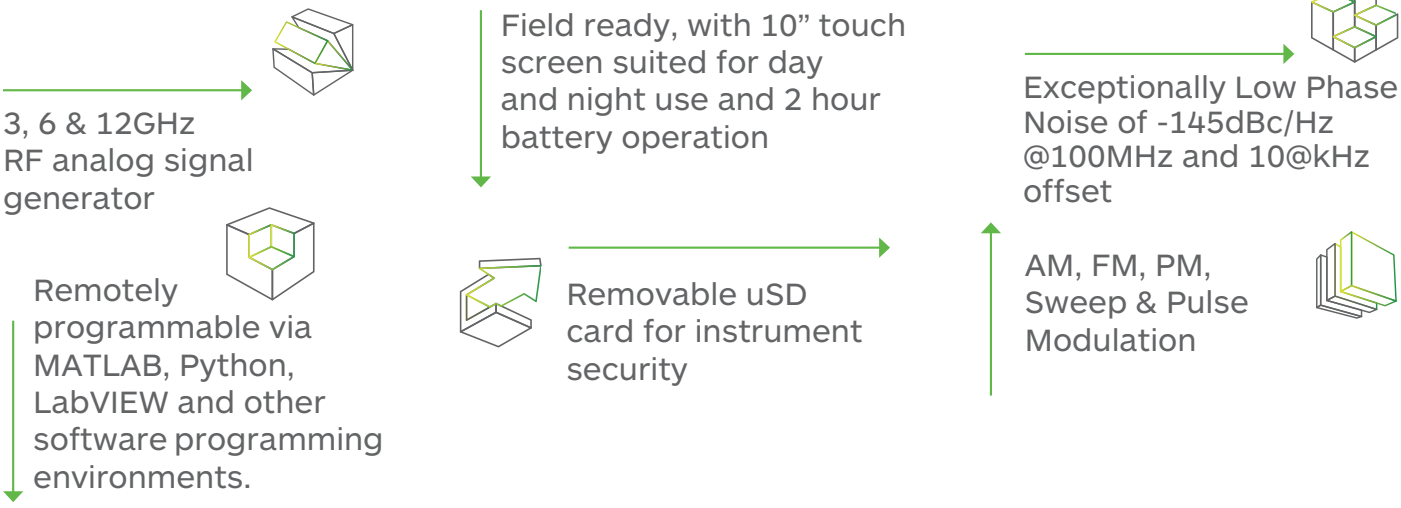
PORTABLE MODELS

LUCID SERIES

THINK RF THINK **LUCID**

Tabor's latest addition to its line of RF analog signal generators is by far the most advanced portable, handheld signal generator on the market. The all-new Lucid Series portable platform offers a modern design capable of operating either as a benchtop or a portable signal generator. The series feature 3, 6 and 12 GHz single channel versions, all sharing the very same industry leading highlighted features. Featuring extremely fast switching speed, superior signal integrity and purity, all the necessary modulated signals for analog communication systems, with built in USB interface and removable micro-SD card, the Lucid Series is designed to meet today's most demanding applications, whether in the lab or out in the field.



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.

LUCID SERIES
THINK RF THINK **LUCID**

Multiple Ways to Control the Unit and Write Your Code

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, regardless of whether your application is written for Windows, Linux or Macintosh operating systems.

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 pulse modulation is possible, no matter if its "narrow" or "standard" pulse need. On top of its outstanding pulse modulation performance, the Lucid Series is also equipped with many CW interferers, and modulated signals such as AM, FM, PM and Sweep.

Easy to use

Tabor's Lucid series portable platform offers a 10" touch screen with user friendly GUI to quickly and easily generate the required signal, while displaying all the necessary critical information to the user. For remote control, the series is equipped with a built-in USB interface enabling remote programming from PC. For those requiring LAN interface a USB to LAN converter can be provided.

LS3081P/LS6081P/LS1291P

3, 6 or 12 GHz Portable RF Analog Signal Generator

PRELIMINARY

Specifications

FREQUENCY	
Range:	
LS3081P:	100 kHz to 3GHz
LS6081P:	100 kHz to 6GHz
LS1291P:	100 kHz to 12GHz
Resolution:	0.001 Hz
Phase offset:	0.01 deg
Switching speed:	
Standard:	500us
Digital Sweep Mode (Frequency and amplitude):	
Range:	
LS3081P:	100 kHz to 3GHz
LS6081P:	100 kHz to 6GHz
LS1291P:	100 kHz to 12GHz
Dwell time:	10us to 1000s 1us resolution
Number of points:	
List:	2 to 4096
Step:	2 to 65535
Step change:	Linear or logarithmic
Trigger:	Free run, External, Bus, Timer

FREQUENCY REFERENCE	
Temp. Stability:	±100 ppb, ±20 ppb (option)
Aging:	± 1.25 ppm for 10 years
Warm up time:	30 min
Internal:	
Output Frequency:	10/100 MHz
Output Wave shape:	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
Absolute Max.	
Input Level:	+15 dBm
Input Impedance:	50Ω
Locking Range:	20Hz
Wave shape:	Sine or Square

AMPLITUDE	
Max output power:	+15 dBm
Min output power:	-20dBm
Resolution:	0.01 dB
Power Mute:	-65dBm
Output Return Loss:	-10dBm
Switching speed:	100 us
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)

HARMONICS (dBc)	
up to 12 GHz:	-40dBc

NON HARMONICS (dBc)	
up to 12 GHz:	-60dBc

MODULATION	
FREQUENCY MODULATION	
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)
Resolution:	0.1% or 1 Hz (the greater)
Modulation Rate:	1 MHz
PHASE MODULATION	
Peak Deviation:	300 rad
AMPLITUDE MODULATION	
AM Depth Linear:	+15 dBm
Maximum settable:	90%
Resolution:	0.1% of depth
Accuracy (1 kHz rate):	< ± 4% of setting
AM Depth Exponential:	
Maximum settable:	40 dB
Resolution:	0.01 dB
Accuracy (1kHz rate):	< ± 4% of setting
Modulation rate:	DC to 100 kHz

INPUTS	
MODULATION INPUT	
Connector Type:	SMA
Input Impedance:	50Ω
AM, FM, modulation	
Max. input voltage:	1V
Input damage level:	±3.5V
TRIGGER INPUT	
Connector type	SMA
Input Impedance	50Ω or 10kΩ
Input voltage	TTL, CMOS compatible
Damage level	±5V
EXTERNAL REFERENCE INPUT	
Connector type	SMA
Input Impedance	50Ω
Waveform	Sine or Square
Frequency	10/100MHz

LS3081P/LS6081P/LS1291P

3, 6 or 12 GHz Portable RF Analog Signal Generator

PRELIMINARY

Specifications

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	25W
Battery	4-cell, replaceable 2 hours operation
Interface	2 x USB host, (type A) 1 x USB device, (type C) 1 x USB device, (type B)
Dimensions:	28 x 22.5 x 6.5 cm (W x H x D)
Weight	
Without Package	TBD
Shipping Weight	TBD
Temperature	
Operating	0°C to +40°C
Storage	-40°C to +70°C
Warm up time:	15 minutes
Humidity:	85% RH, non - condensing
Safety:	CE Marked, IEC610101 1:2008
EMC:	IEC 61326-1:2006
Calibration	2 years

ORDERING INFORMATION	
MODEL	**DESCRIPTION**
LS3081P	3GHz Portable RF Analog Signal Generator
LS6081P	6GHz Portable RF Analog Signal Generator
LS1291P	12GHz Portable RF Analog Signal Generator
OPTION	
SD	Removable SD memory card
Battery	4-cell, replaceable battery
Ruggedized	Ruggedized case
Emulator pack	Emulator for Keysight, R&S, Anapico & Holzworth