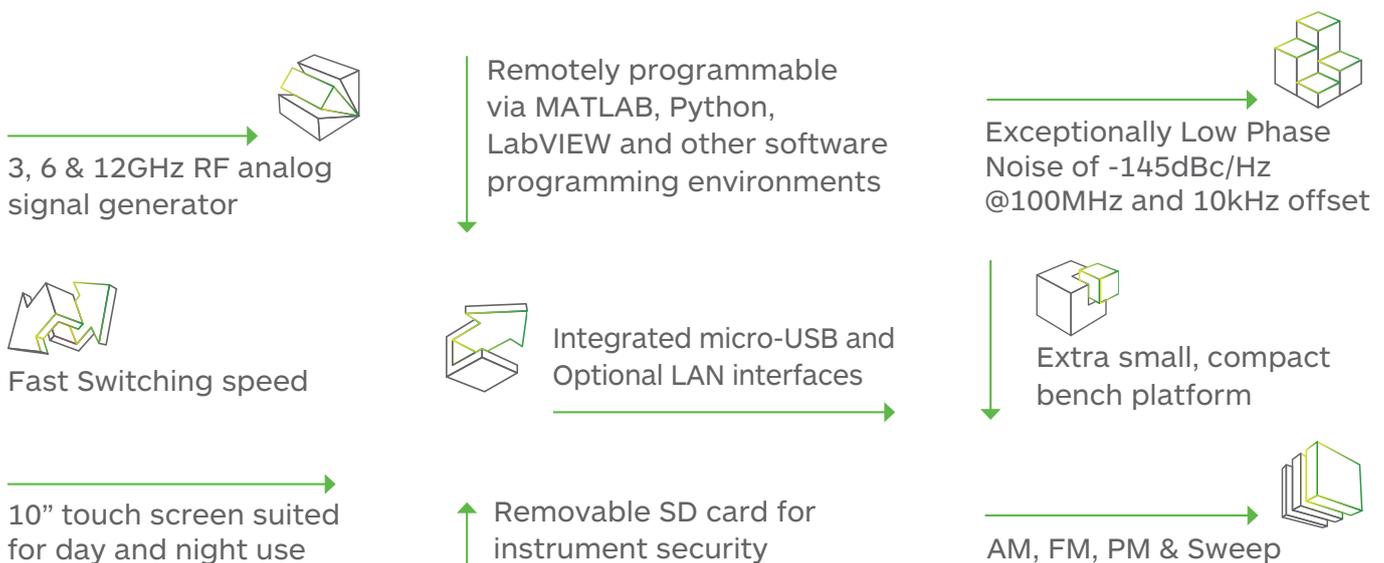


LS3081P/LS6081P/LS1291P-DST

3, 6 or 12 GHz RF Analog Portable Benchtop 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.

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 | |
|--------------------------------|--|---------------------------------|--------------------------------|-----------------------------|----------------------------------|
| Range: | | FREQUENCY MODULATION | | RF OUT | |
| LS3081P: | 9 kHz to 3GHz | Maximum Deviation: | 10 MHz | Impedance: | 50Ω |
| LS6081P: | 9 kHz to 6GHz | Resolution: | 0.1% or 1 Hz (the greater) | Connector type: | SMA |
| LS1291P: | 9 kHz to 12GHz | Modulation Rate: | 1 MHz | Number of channels: | 1 |
| Resolution: | 0.001 Hz | Resolution: | 1 Hz | GENERAL | |
| Phase offset: | 0.01 deg | AMPLITUDE MODULATION | | Voltage: | +12.0 to +12.6 VDC |
| Switching speed: | 500 μs | AM Depth: | | Supply Voltage: | +15 V DC |
| FREQUENCY REFERENCE | | Type: | Linear | Power Consumption: | 60W max. (45W typ) |
| Temp. Stability: | ±25 ppb max. | Maximum settable: | 90% | Display Type | 10", TFT capacitive touch screen |
| Aging: | ± 3 ppm for 20 years | Resolution: | 0.1% of depth | Interface: | |
| Warm up time: | 30 min | Accuracy (1 kHz) | < ± 4% of setting | USB Host: | 2, type A |
| AMPLITUDE | | Modulation rate: | DC to 100 kHz | USB Device: | 1, type B |
| Max output power: | | PHASE MODULATION | | LAN (Optional): | 1, microUSB |
| Settable: | +20 dBm | Peak Deviation: | 360 deg | Dimensions (WxHxD): | 280 x 225 x 65 mm |
| Calibrated: | +15 dBm ⁽¹⁾ | Modulation Rate: | DC to 100 kHz | Weight: | |
| Min output power: | | SWEEP | | Without Package: | 3 kg |
| Settable: | -80 dBm | Range: | Same as freq. range | Shipping Weight: | 3.5 kg |
| Calibrated: | -60 dBm | Modes: | Frequency and amplitude | Temperature: | |
| Resolution: | 0.01 dB | Dwell time: | 10 μs to 1000 s | Operating: | 0°C to +40°C |
| Power Mute: | -95 dBm | Resolution: | 1 μs | Storage: | -40°C to +70°C |
| Output Return Loss: | -10 dBm | Number of points: | 2 to 65535 | Warm up time: | 15 minutes |
| Accuracy (dB): | | Step change: | Linear | Humidity: | 85%, non-condensing |
| Up to 100MHz: | ±0.3 (typ.) | Trigger: | Free run, External, Bus, Timer | Safety: | CE Marked, IEC61010-1:2010 |
| 100MHz to 3GHz: | ±0.4 (typ.) | INPUTS | | EMC: | IEC 61326-1:2013 |
| 3GHz to 9GHz: | ±0.7 (typ.) | MODULATION INPUT | | Calibration: | 1 years |
| Above 9GHz: | ±1 (typ.) | Connector Type: | SMA | Warranty: | 1 year |
| PHASE NOISE (dBc/Hz) | | Input Impedance: | 50Ω | ORDERING INFORMATION | |
| Measured @ 10kHz offset | | Max. input voltage: | ±1V | MODEL | DESCRIPTION |
| 1 GHz: | -138 (typ.) | Input damage level: | ±3.5V | LS3081P-DST | 3GHz RF Analog Signal Generator |
| 2 GHz: | -133 (typ.) | PULSE / TRIGGER INPUT | | LS6081P-DST | 6GHz RF Analog Signal Generator |
| 3 GHz: | -130 (typ.) | Connector type: | SMA | LS1291P-DST | 12GHz RF Analog Signal Generator |
| 6 GHz: | -124 (typ.) | Input Impedance: | 50Ω | | |
| 12 GHz: | -118 (typ.) | Input voltage: | TTL, CMOS compatible | | |
| HARMONICS (dBc) | | Threshold: | 1.5V | | |
| Up to 100 MHz: | -30 dBc | Damage level: | -0.42V or 5.42V | | |
| 100 MHz to 12 GHz: | -50 dBc ⁽²⁾ | EXTERNAL REFERENCE INPUT | | | |
| SUB-HARMONICS (dBc) | | Connector type: | SMA | | |
| 6 to 12 GHz: | -55 dBm | Input Impedance: | 50Ω | | |
| NON-HARMONICS (dBc) | | Waveform: | Sine or Square | | |
| Up to 12 GHz: | -90dBc (typ.) ^(3,4) -60dBc max. ⁽⁵⁾ | Frequency: | 10/100MHz | | |
| | | Power: | -3 dBm to +10 dBm | | |
| | | Absolute Max. Level: | +15 dBm | | |
| | | Locking Range: | ±2 ppm | | |

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⁽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 appear @ -100MHz to +100MHz offset from CW