TSG4100A RF Vector Signal Generators feature:

- **Up to 6GHz frequency coverage**: True DC to 2 GHz, 4GHz, and 6GHz coverage that supports analog and basic digital/vector signal generation
- **Software upgradable advanced vector modulation standards:** GSM, EDGE, W-CDMA, APCO-25, TETRA, and more!
- **High fidelity signal generation** : Outstanding amplitude accuracy (+/-0.3dB) and frequency resolution (1 µHz)
- **Compact and Portable**: 2U high and half standard rack width; 12 pounds (5.6 kg)
- **Easy instrument connectivity**: Supported through GPIB, LAN, USB, and RS-232 interfaces

Request Pricing Now.

New RF Signal Generator Series from Tektronix Leads the Industry in Price-Performance
(Press Release March 3, 2015)

- *New TSG4100A Vector Signal Generator Meets Growing Need for More Affordable Mid-Range RF Test and Measurement solutions*

BEAVERTON, Ore., March 3, 2015 - Tektronix, Inc., a leading worldwide provider of test, measurement and monitoring instrumentation, today introduced the [TSG4100A series of signal generators](). The TSG4100A is a vector signal generator (VSG) at the affordable price of a basic signal generator. The new RF signal generator complements other leading mid-range RF test solutions from Tektronix, such as the USB-based RSA306 spectrum analyzer, [MDO4000B]() and [MDO3000]() mixed domain oscilloscopes.

RF signal generators are widely used in product design, testing and manufacturing. Until now, RF engineers and technicians had to choose between basic RF signal generators or far more expensive vector signal generators (VSG). The TSG4100A offers a VSG at an affordable RF signal generator price. Further, as an engineer's needs change, the TSG4100A can be easily upgraded in the field to deliver more advanced vector and digital modulation capabilities.

"There is a clear need in wireless design and manufacturing for test solutions that are more affordable and still meet demanding requirements," said James McGillivary, general manager of RF and Component Solutions at Tektronix. "Tektronix first made huge strides in filling this void with the highly disruptive [RSA306 USB-based spectrum analyzer](). Now we are continuing this momentum with the TSG4100A that offers unbeatable price performance in an RF vector signal generator."

Great RF Performance
The TSG4100A series includes three models with carrier frequencies from DC to 2.0 GHz, 4.0 GHz and 6.0 GHz respectively. The instruments provide spur-free outputs with low phase noise (-113 dBc/Hz at 1 GHz), outstanding amplitude accuracy (<+/- 0.4 dB at 1 GHz, 0dBm CW signal from +16dBm to -100 dBm level range) and excellent frequency resolution (1 µHz at any frequency). An oven-controlled crystal oscillator time-base provides <±0.002 ppm temperature stability and <±0.05 ppm aging stability, the most accurate and stable available for a mid-range signal generator.

Analog Modulation
TSG4100A signal generators offer a wide variety of modulation capabilities. Modes include amplitude modulation (AM), frequency modulation (FM), phase modulation (ΦM), and pulse modulation. There is an internal modulation source as well as an external modulation input. Unlike most analog signal generators, the TSG4100A can sweep continuously from DC to 62.5 MHz. And for frequencies above 62.5 MHz, each sweep range covers more than an octave.

Vector Modulation
Units can be software upgraded to support VSG applications. With the vector upgrade, TSG4100A series offers full support for vector signal modulation on RF carriers between 400 MHz and 6.0 GHz. It features a dual, arbitrary waveform generator operating at 125 MHz for baseband signal generation. The generator has built-in support for the most common vector modulation schemes: ASK, QPSK, DQPSK, π/4 DQPSK, 8PSK, FSK, CPM, QAM (4 to 256), 8VSB, and 16VSB. It also includes the standard pulse shaping filters used in digital communications: raised cosine, root-raised cosine, Gaussian, rectangular, triangular, and more. For additional flexibility, the rear-panel BNC I/Q modulation inputs support arbitrary vector modulation from an external source.