

Analog High-Speed Products



Product Announcement (available Q4 2010) 9 kHz to 6100 MHz Signal Generator APSIN6010

The APSIN6010 is a low phase noise, extremely fast-switching RF signal generator with μ -Hz frequency resolution, and precisely leveled power range from -140 to +16 dBm. It combines excellent signal quality, highquality analog modulation and fast switching capabilities. Flexible and simultaneous modulation allows complex signal simulation. The internal OCXO guarantees a high stability time base. The modular design simplifies maintenance and minimizes cost of ownership.



Wideband FM (4 GHz, 275 MHz deviation, 10 kHz rate)



Narrowband FM (4 GHz, 24 kHz deviation, 10 kHz rate)





Key Features

- Only 200 μs frequency switching time
- Very low SSB phase noise
- Comprehensive AM, low-distortion, wideband FM and PM and high speed pulse modulation for testing all types of receivers
- LAN/USB/GPIB (optional) remote control
- Input for USB power sensor
- Powerful trigger and sweeping modes
- Applications
- R&D high-quality lab source
- Education
- Production test & measurement
- Automated test systems (ATE)
- EMC testing

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Key Specifications

| Parameter | Value | Notes |
|--------------------------------------------------------------|---------------------------------------------------|-----------------------------------------------------|
| Frequency range | 9 kHz – 6100 MHz | |
| resolution | 0.1 mHz | |
| Phase resolution | 0.1 deg | |
| Settling time | 0.2 ms | |
| SSB Phase noise | | |
| at 20 kHz from carrier | -120 dBc/Hz | 3 GHz carrier |
| wideband noise | -150 dBc/Hz | |
| Power level | · · · · · · · · · · · · · · · · · · · | |
| Range | -30 – +16 dBm -100 – +16 dBm -140 – +16 dBm | Standard Option PE Option PE2 |
| Resolution | 0.01 dB | |
| Level uncertainty | < 1 dB | |
| Output impedance VSWR | 50 Ω 1.5 typical | |
| Spectral purity output harmonics non-harmonic spurious | < -30 dBc < -60 dBc | |
| | > FO | |
| Time resolution | > 50 μs | |
| List sizo | 10 μs | |
| Trigger | Auto outomal hus sated | |
| Frequency Modulation | Auto, external, bus, gated | |
| Modulation rate | DC to 800 kHz | |
| Maximum deviation | >7% of f | |
| Distortion | 0.1.9/ | $f_{1} = 1 \text{ kHz} \ \& f_{1} = 10 \text{ MHz}$ |
| Amplitude Modulation | 0.1 /6 | |
| Rate | 0 1 Hz – 50 kHz | sine pulse triangle |
| Depth | 0 to 95 % | |
| Distortion | 1.5 % at 30 % | f _{mod} = 1 kHz |
| Pulse Modulation | 2 /0 40 00 /0 | |
| Rate | DC – 10 MHz | |
| On/OFF Ratio | > 60 dB | |
| Pulse width | > 50 ns | |
| Rise/Fall times | < 10 ns | |
| Internal reference frequency | 100 MHz | |
| Temperature stability | ±100 ppb | 0 to 50 °C |