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Data Sheet

August 14, 2026

FLUKE

Fluke 6080A/AN " Synthesized Signal Generator

The Fluke 6080A/AN is a synthesized signal generator that delivers high-performance frequency coverage and exceptional signal purity. Ideal for a broad range of RF testing applications, it offers precise control and reliable signal generation.



MODEL

Fluke 6080A/AN

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

6080A/AN

LISTING

<https://aumictechlabs.com/products/6080a-an-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Fluke 6080A/AN is a synthesized RF signal generator delivering precise, low-noise signals across 10 kHz to 1056 MHz. Purpose-built for receiver testing, calibration, and characterization in telecommunications, aerospace, and research environments, it combines frequency accuracy of $\pm (2 \text{ ppm} + 1 \text{ Hz})$ with output amplitude control spanning +19 dBm to -140 dBm (below 512 MHz) and +17 dBm to -140 dBm (512 MHz and above). The instrument features 1 Hz frequency resolution, $\pm 0.75 \text{ dB}$ output flatness, and comprehensive modulation capabilities including AM, FM, PM, FSK, PSK, pulse, and sweep modes. Its digitally synthesized internal modulation source generates sinusoidal, square, triangular, and pulse waveforms at rates from 0.1 Hz to 200 kHz, with AM depths to 99.9% and distortion below 1.5% at 1 kHz. Frequency stability holds $\pm (5 \text{ ppm} + 5 \text{ Hz})$ per day and per year. External reference inputs accept 1, 2, 5, or 10 MHz signals at $\pm 10 \text{ ppm}$ with

0.2 to 2.0 Vrms into 50 Ω impedance. The 10 MHz reference output delivers >0 dBm into 50 Ω load with nominal 50 Ω source impedance. Amplitude resolution of 0.1 dB and accuracy of ± 0.5 dB enable demanding measurement and test scenarios. Output level switching completes within 100 ms to within 0.1 dB. Source SWR remains <1.5:1 for levels below +6 dBm and 0 dBm into 50 Ω

Output Amplitude Range (6080A, <512 MHz): +19 dBm to -140 dBm Range (6080A, ≥ 512 MHz): +17 dBm to -140 dBm Resolution: 0.1 dB Accuracy: ± 0.5 dB Flatness: ± 0.75 dB Output impedance: 50 Ω nominal Level switching time: <100 ms to ± 0.1 dB Modulation Modes: AM, FM, PM, FSK, PSK, Pulse, Sweep Internal waveforms: Sinusoidal, Square, Triangular, Pulse Modulation rates: 0.1 Hz to 200 kHz (sine/triangle/square); 10 Hz to 200 kHz (pulse) AM depth: 0 to 99.9% (output <+10 dBm) AM distortion: <1.5% (0–30%), <3% (30–70%), <5% (70–90%) at 1 kHz AM 3 dB bandwidth: 20 Hz to 50 kHz (AC coupled); DC to 50 kHz (DC or internal) Key Features Synthesized architecture with 1 Hz frequency granularity AM depth indicator accuracy of $\pm(4\%$ of setting +2%) to 90% Incidental phase modulation <0.2 radian at 30% AM, 1 kHz rate Programmable function generator for modulation source Preset modulation frequencies of 400 Hz and 1000 Hz Configurable external reference with multiple standard frequencies Typical Applications Receiver sensitivity and selectivity measurement RF subsystem calibration and validation Spectral purity characterization Phase noise assessment Modulated signal testing in communications systems Compatibility & Integration 50 Ω system impedance throughout. External frequency reference via configurable input accepts industry-standard clock signals. Reference output enables distribution to synchronized test setups.

6080AAN Characteristics / Specifications

PARAMETER	VALUE
Frequency Range	0.5 to 1024 MHz
Frequency Resolution	1 Hz
Frequency Display	10 digit
Switching Speed	less than 100 ms to within 100 Hz
Reference Output Frequency	10 MHz sinewave
Reference Output Level	greater than 0 dBm into 50 ohm
SSB Phase Noise 0.5 to 512 MHz At 20 kHz	less than -130 dBc/Hz
SSB Phase Noise 512 to 1024 MHz At 20 kHz	less than -124 dBc/Hz
Non Harmonic Spurious Offsets Greater Than 15 kHz	less than -100 dBc
Harmonics Output Less Than Plus 7 dBm	less than -30 dBc
Residual FM	less than 20 Hz rms (50 Hz to 15 kHz BW)
Residual AM	less than -80 dBc (50 Hz to 15 kHz BW)
Output Level Range	plus 13 dBm to minus 137 dBm
Output Level Resolution	0.1 dB
Absolute Accuracy Plus 13 to Minus 117 dBm	plus or minus 1.5 dB
Absolute Accuracy Minus 117 to Minus 137 dBm	plus or minus 3 dB
Flatness At Plus 10 dBm	plus or minus 1.0 dB
Output Impedance	50 ohm nominal
VSWR Level Less Than Minus 10 dBm	less than 1.5 to 1
AM Depth	0 percent to 99.9 percent
FM Internal Rate	10 Hz to 100 kHz
Pulse Rise Fall Time	less than 1 us

PARAMETER	VALUE
Internal Mod Oscillator Frequency	10 Hz to 100 kHz
Non Volatile Memory Locations	50
Operating Temperature	0 C to 50 C
Size HxWxD	13.3 cm x 43.2 cm x 59.1 cm
Weight	27.3 kg
Power	115/230 V ac 50/60/400 Hz 200 VA max
Interface	IEEE-488

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 C to 50 C
Operating Temperature	0 C to 50 C
Size HxWxD	13.3 cm x 43.2 cm x 59.1 cm
Weight	27.3 kg
Power	115/230 V ac 50/60/400 Hz 200 VA max
Interface	IEEE-488 Notes From Fluke 6080A/AN Synthesized RF Signal Generators datasheet. Some commercial 6080A summaries cite extended 0.1 to 1056 MHz class coverage; use the faceplate and the unit operation/service manual for the authoritative band and level matrix.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

specifications list SSB phase noise less than -130 dBc/Hz at 20 kHz offset below 512 MHz, non-harmonic spurious less than -100 dBc for offsets greater than 15 kHz, output from plus 13 to minus 137 dBm, and simultaneous AM FM phase and pulse modulation.

Applications
Critical receiver sensitivity selectivity and overload testing, RF design and LO substitution, complex modulated signal simulation, and automated GPIB production test of communications equipment.

Key Features
High spectral purity with low residual FM
Simultaneous AM FM phase and pulse modulation
Internal synthesized modulation oscillator
Digital frequency and amplitude sweep
Closed-case calibration via GPIB or front panel

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Frequency Range	0.5 to 1024 MHz
Frequency Resolution	1 Hz
Frequency Display	10 digit
Switching Speed	less than 100 ms to within 100 Hz
Reference Output Frequency	10 MHz sinewave
Reference Output Level	greater than 0 dBm into 50 ohm

SSB Phase Noise 0.5 to 512 MHz At 20 kHz: less than -130 dBc/Hz
SSB Phase Noise 512 to 1024 MHz At 20 kHz: less than -124 dBc/Hz
Non Harmonic Spurious Offsets Greater Than 15 kHz: less than -100 dBc

Specifications

PARAMETER	VALUE
Harmonics Output Less Than Plus 7 dBm	less than -30 dBc
Residual FM	less than 20 Hz rms (50 Hz to 15 kHz BW)
Residual AM	less than -80 dBc (50 Hz to 15 kHz BW)
Output Level Range	plus 13 dBm to minus 137 dBm
Output Level Resolution	0.1 dB

Absolute Accuracy Plus 13 to Minus 117 dBm: plus or minus 1.5 dB
Absolute Accuracy Minus 117 to Minus 137 dBm: plus or minus 3 dB

Specifications

PARAMETER	VALUE
Flatness At Plus 10 dBm	plus or minus 1.0 dB
Output Impedance	50 ohm nominal
VSWR Level Less Than Minus 10 dBm	less than 1.5 to 1
AM Depth	0 percent to 99.9 percent
FM Internal Rate	10 Hz to 100 kHz
Pulse Rise Fall Time	less than 1 us
Internal Mod Oscillator Frequency	10 Hz to 100 kHz
Non Volatile Memory Locations	50
Operating Temperature	0 C to 50 C
Size HxWxD	13.3 cm x 43.2 cm x 59.1 cm
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Notes

From Fluke 6080A/AN Synthesized RF Signal Generators datasheet. Some commercial 6080A summaries cite extended 0.1 to 1056 MHz class coverage; use the faceplate and the unit operation/service manual for the authoritative band and level matrix.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.