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Data Sheet

August 15, 2026

AEROFLEX IFR

Aeroflex IFR 2023A 9 kHz to 1.2 GHz Signal Generator

Aeroflex IFR 2023A Synthesized Signal Generator 9 kHz to 1.2 GHz The Aeroflex/IFR 2023A is a portable synthesized signal generator covering 9 kHz to 1.2 GHz. OEM 2023A/B and 2025 datasheet rates 1 Hz resolution, RF output from minus 140 dBm to plus 13 dBm, AM/FM/phase/pulse/FSK modulation, GPIB and RS-232, and reverse power protection to 50 W. Receiver testing, production ATE stimulus, EMI investigations with square-wave AM, and portable maintenance signal generation. Electronic reverse power protection to 50 W The Aeroflex/IFR 2023A is a portable synthesized signal generator covering 9 kHz to 1.2 GHz. OEM 2023A/B and 2025 datasheet rates 1 Hz resolution, RF output from minus 140 dBm to plus 13 dBm, AM/FM/phase/pulse/FSK modulation, GPIB and RS-232, and reverse power protection to 50 W. Receiver testing, production ATE stimulus, EMI investigations with square-wave AM, and portable maintenance signal generation. Electronic reverse power protection to 50 W

Instrument Type: synthesized signal generator



MODEL

**Aeroflex IFR
2023A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

2023A

LISTING

<https://aumictechlabs.com/products/2023a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Aeroflex IFR 2023A is a synthesized signal generator spanning 9 kHz to 1.2 GHz, engineered for RF testing across laboratory, production, and field maintenance environments. It delivers

stable, spectrally pure signals with low phase noise suitable for characterizing narrow-band communication systems and components. The instrument combines analog modulation capability AM, FM, phase modulation, pulse, and FSK - with intuitive front-panel operation and automated test equipment integration via GPIB and RS-232 interfaces.

Technical Specifications

Frequency Range: 9 kHz to 1.2 GHz RF Output Level: Range: -140 dBm to +13 dBm (standard); extends to +25 dBm with optional high-power module Resolution: 0.1 dB VSWR: Class-leading performance Reverse Power Protection: 50 W with VSWR up to 5:1 Output Level Offset: ± 5 dB compensation available Modulation Modes: AM: 0 to 99.9% depth (0.1% resolution); 30 kHz bandwidth (1 dB); +7 dBm max output at 99.9% depth FM: 0 to 100 kHz deviation ($\pm 5\%$ accuracy at 1 kHz modulation rate); 100 kHz bandwidth (1 dB); very low carrier frequency error in DC coupled mode Phase Modulation: 0 to 10 radians; 10 kHz bandwidth (3 dB) Pulse Modulation: >40 dB on/off ratio; <10 μ s rise time; fast pulse option available FSK: 3.9 kHz Bessel filtered Internal LF Generator: Waveforms: Sine, triangular, square Frequency: Sine to 20 kHz; triangular/square to 3 kHz Output: 2 V RMS from 600 Ω source impedance via front-panel BNC Two-tone modulation capability

Key Features

- Carrier on/off control via dedicated key
- Output level limit protection for sensitive external devices
- Selectable RF output units: μ V, mV, EMF, PD, dB relative to 1 μ V/1 mV/EMF/PD, dBm
- Menu-driven operation with clear display

Typical Applications

- Receiver characterization and sensitivity testing
- Communication system component validation
- Transmitter linearity and modulation accuracy assessment
- Narrow-band system development and qualification

Compatibility & Integration

GPIB and RS-232 interfaces enable direct integration into automated test systems and remote instrument control.

2023A Characteristics / Specifications

PARAMETER	VALUE
Model	2023A
Instrument Type	synthesized signal generator
Carrier Frequency Range	9 kHz to 1.2 GHz
Frequency Resolution	1 Hz
Frequency Accuracy	equal to frequency standard
Phase Increment Step	0.09 degree
RF Output Range	minus 140 dBm to plus 13 dBm
RF Level Resolution	0.1 dB
RF Output Connector	50 Ohm typeNOutput VSWR Below Minus 5 dBm To 1.2 GHz: less than 1.3 to 1
Reverse Power Protection	50 W from 50 Ohm
Residual FM Typical	3 Hz
SSB Phase Noise Typical At 1 GHz 20 kHz Offset	minus 121 dBc/Hz
SSB Phase Noise Typical At 100 Hz Offset	less than minus 85 dBc
AM Depth Range	up to 99.9 percent
AM Depth Resolution	0.1 percent
AM Bandwidth 1 dB	30 kHz
Pulse On Off Ratio Standard	better than 40 dB
Pulse Rise Fall Standard	less than 10 us
FM Deviation Maximum Above 1.2 GHz Class	up to 12.8 MHz class family table
FM Bandwidth 1 dB	275 kHz
Phase Modulation Deviation	0 to 10 radians
Phase Modulation Bandwidth 3 dB	up to 10 kHz
FSK Filter	3.9 kHz 8th order Bessel

PARAMETER	VALUE
Internal AF Range	0.01 Hz to 20 kHz
Nonvolatile Carrier Stores	100
Nonvolatile Instrument Stores	100
Remote Interfaces	GPIB IEEE 488.2 and RS-232
Height	2U rack
Series Family	Aeroflex IFR 2023A/B 2025
Bandwidth	1 dB: 30 kHz

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	
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Notes

Numeric rows from IFR/Aeroflex 2023A/B and 2025 Signal Generators datasheet specification section for model 2023A.

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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NIST-traceable calibration · SAM registered ·
30-day returns
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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.