

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 3, 2026

AEROFLEX

Aeroflex FS1000 Fast Switching Synthesizer

Marconi IFR Aeroflex FS1000 Fast Switching Synthesizer The FS1000 (FastSource 1000) provides an Aeroflex fast-switching RF synthesizer covering 4.5 MHz to 6010 MHz with <100 μ s switching to within 1.0 radian of final phase. Designed for telecommunications and high-agility stimulus, it offers 2 Hz resolution (4 Hz above 4 GHz), +7 dBm output, and low phase noise / spurious performance. Single (S) or dual (D) synthesizer chassis configurations are available. Fast frequency-hopped RF stimulus; telecom ATE; agile LO; dual-source coherent/independent RF generation (dual chassis). The FS1000 (FastSource 1000) provides an Aeroflex fast-switching RF synthesizer covering 4.5 MHz to 6010 MHz with <100 μ s switching to within 1.0 radian of final phase. Designed for telecommunications and high-agility stimulus, it offers 2 Hz resolution (4 Hz above 4 GHz), +7 dBm output, and low phase noise / spurious performance. Single (S) or dual (D) synthesizer chassis configurations are available. Fast frequency-hopped RF stimulus; telecom ATE; agile LO; dual-source coherent/independent RF generation (dual chassis).

No photo

MODEL

Aeroflex FS1000

CALIBRATION

**N/A — off-catalog
OEM datasheet**

CONDITION

**See OEM
documentation**

STATUS

**Not listed on
Aumictech
inventory**

RFQ / SKU

FS1000

LISTING

**Off-catalog — OEM dat
asheet only**

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

Features & description

From manufacturer datasheet

Features

- Frequency: 4.5 MHz to 6010 MHz • Switching: <100 μ s to within 1.0 radian • Step size: 2 Hz ($\leq$ 4 GHz); 4 Hz (4–6.01 GHz) • Output power: +7 dBm; flatness $\pm$ 1.5 dB • Spurious (max): –65 dBc (4–2000 MHz); –60 dBc (2–4 GHz); –55 dBc (4–6.01 GHz) • Phase noise @ 1 GHz class: better than –130 dBc/Hz at 10 kHz offset (OEM headline) • Harmonics: –25 dBc max; subharmonics –60 dBc typ. (–50 dBc max with noted exceptions) • External 10 MHz reference (3 dBm $\pm$ 4 dB); ref out +3 dBm $\pm$ 2 dB • Parallel BCD frequency control with strobe; RF remote on/off • Dimensions: 16.75" W $\times$ 5.22" H $\times$ 23.86" D; +10 to +45 °C; 105–125 VAC 50–60 Hz

FS1000 Characteristics / Specifications

PARAMETER	VALUE
Model	FS1000 / FastSource 1000
Manufacturer	Aeroflex (IFR / Marconi lineage)
Instrument Type	Fast Switching RF Synthesizer
Alias	FS1000; FS 1000 Frequency
Range	4.5 MHz to 6010 MHz
Step Size	2 Hz (to 2000 MHz and 2000–4000 MHz); 4 Hz (4000–6010 MHz)
Switching Time	<100 μ s to within 1.0 radian of final phase
Port Switching	<5 μ s between ports; isolation $\geq$ 25 dB between ports Output
Power	+7 dBm
Flatness	$\pm$ 1.5 dB
VSWR	1.8:1
Harmonics	–25 dBc max; subharmonics –60 dBc typ. (–50 dBc max with noted exceptions)
On/Off Ratio	<25 dBc (RF off via remote)
Phase Noise / Residual FM (OEM tables	examples)
Logic	Parallel BCD, positive or negative true with strobe (trailing edge); 50-pin AMP 554216-3 class receptacle
Initialization	RF Off at power-up
Configuration	S = single; D = dual independent synthesizers in one chassis General AC: 105–125 VAC, 50–60 Hz
Temperature	+10 to +45 $^{\circ}$ C
Vibration	10–300 Hz @ 1.2 G RMS (OEM)
Dimensions	16.75" $\times$ 5.22" $\times$ 23.86" (W $\times$ H $\times$ D) Standard Operating Conditions OEM electrical tables at specified conditions; frequency stability follows external reference when used. Operational Notes ConfirmSvsDconfiguration. Observe OEM spur notes below 180 MHz and in the 1–2 GHz band.
Frequency	4.5 MHz to 6010 MHz

PARAMETER	VALUE
Switching	<100 μ s to within 1.0 radian
Output power	+7 dBm; flatness $\pm$ 1.5 dB
Spurious (max)	–65 dBc (4–2000 MHz); –60 dBc (2–4 GHz); –55 dBc (4–6.01 GHz)
Phase noise @ 1 GHz class	better than –130 dBc/Hz at 10 kHz offset (OEM headline)

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.

performance. Single (S) or dual (D) synthesizer chassis configurations are available.

Applications

Fast frequency-hopped RF stimulus; telecom ATE; agile LO; dual-source coherent/independent RF generation (dual chassis).

Key Features

- Frequency: 4.5 MHz to 6010 MHz
- Switching: <100 μ s to within 1.0 radian
- Step size: 2 Hz ($\leq$ 4 GHz); 4 Hz (4–6.01 GHz)
- Output power: +7 dBm; flatness $\pm$ 1.5 dB
- Spurious (max): –65 dBc (4–2000 MHz); –60 dBc (2–4 GHz); –55 dBc (4–6.01 GHz)
- Phase noise @ 1 GHz class: better than –130 dBc/Hz at 10 kHz offset (OEM headline)
- Harmonics: –25 dBc max; subharmonics –60 dBc typ. (–50 dBc max with noted exceptions)
- External 10 MHz reference (3 dBm $\pm$ 4 dB); ref out +3 dBm $\pm$ 2 dB
- Parallel BCD frequency control with strobe; RF remote on/off
- Dimensions: 16.75" W $\times$ 5.22" H $\times$ 23.86" D; +10 to +45 $^{\circ}$ C; 105–125 VAC 50–60 Hz

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	FS1000 / FastSource 1000
Manufacturer	Aeroflex (IFR / Marconi lineage)
Instrument Type	Fast Switching RF Synthesizer
Alias	FS1000; FS 1000

Frequency

Frequency

PARAMETER	VALUE
Range	4.5 MHz to 6010 MHz
Step Size	2 Hz (to 2000 MHz and 2000–4000 MHz); 4 Hz (4000–6010 MHz)
Switching Time	<100 μ s to within 1.0 radian of final phase
Port Switching	<5 μ s between ports; isolation $\geq$ 25 dB between ports

Output

Specifications

PARAMETER	VALUE
Power	+7 dBm
Flatness	$\pm$ 1.5 dB

PARAMETER	VALUE
VSWR	1.8:1
Harmonics	-25 dBc max
On/Off Ratio	<25 dBc (RF off via remote)

Phase Noise / Residual FM (OEM tables – examples)
Noise floor @ 10 MHz offset (by band): about -140 to -134 dBc/Hz class
At FC = 1-2 GHz, 10 kHz offset: typ. -125 / guar. -122 dBc/Hz (OEM residual/phase-noise table)
External reference phase-noise limited when locked

Spurious (maximum)
4-2000 MHz: -65 dBc; 2000-4000 MHz: -60 dBc; 4000-6010 MHz: -55 dBc (Additional fixed-spur notes near certain carriers per OEM datasheet)

Control

Specifications

PARAMETER	VALUE
Logic	Parallel BCD, positive or negative true with strobe (trailing edge); 50-pin AMP 554216-3 class receptacle
Initialization	RF Off at power-up
Configuration	S = single; D = dual independent synthesizers in one chassis

Specifications

PARAMETER	VALUE
General	AC: 105-125 VAC, 50-60 Hz
Temperature	+10 to +45 °C
Vibration	10-300 Hz @ 1.2 G RMS (OEM)
Dimensions	16.75" × 5.22" × 23.86" (W×H×D)

Standard Operating Conditions
OEM electrical tables at specified conditions; frequency stability follows external reference when used.

Operational Notes
ConfirmSvsDconfiguration. Observe OEM spur notes below 180 MHz and in the 1-2 GHz band.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: N/A — off-catalog OEM datasheet. See OEM documentation · Not listed on Aumictech inventory.

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

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 3, 2026

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