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Data Sheet

August 13, 2026

IFR/MARCONI

IFR Marconi 1600S RF Communications Test Set

The IFR (Marconi) FM/AM-1600S is a full-featured 1 GHz radio test set and cellular protocol analyzer platform for TIA/EIA-136 / AMPS / NAMPS work when configured with CSA options. RF signal generation spans 400 kHz to 999.9999 MHz with T/R levels to -137 dBm, a spectrum analyzer and tracking generator, digitized oscilloscope to 1 MHz, DVM, SINAD, and dual AF generators. Color CRT and TMAC macros support guided base-station and handset conformance testing. TIA/EIA-136 and AMPS/NAMPS mobile and base conformance; 1 GHz service-monitor RF/AF measurements; spectrum and tracking-generator antenna work; automated cell-site routines with AutoCell software options. IFR / Marconi FM/AM-1600S Cellular Protocol Analyzer Service Monitor

The IFR (Marconi) FM/AM-1600S is a full-featured 1 GHz radio test set and cellular protocol analyzer platform for TIA/EIA-136 / AMPS / NAMPS work when configured with CSA options. RF signal generation spans 400 kHz to 999.9999 MHz with T/R levels to -137 dBm, a spectrum analyzer and tracking generator, digitized oscilloscope to 1 MHz, DVM, SINAD, and dual AF generators. Color CRT and TMAC macros support guided base-station and handset conformance testing.



MODEL

IFR/Marconi 1600S

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

1600S

LISTING

<https://aumictechlabs.com/products/1600s-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The IFR/Marconi 1600S is a versatile signal generator known for its reliability and accuracy. It has stable and precise signals, making it suitable for demanding testing environments. This unit is

commonly used in the calibration and maintenance of communication equipment and other electronic systems.

Features & description

From manufacturer datasheet

Features

- Full 1 GHz service monitor with spectrum analyzer and tracking generator
- Dual-band cellular protocol options (CSA4 class: 400/800 MHz)
- Dynamic IQ constellation for pi/4 DQPSK analysis
- Dual AF generators; SINAD; BER; EVM meter
- RS-232 and IEEE-488 remote; TMAC macro language
- Color CRT display 640 × 350

1600S Characteristics / Specifications

PARAMETER	VALUE
Model	1600S
Manufacturer	IFR / Marconi (Aeroflex lineage)
Instrument Type	Cellular protocol analyzer / FM AM service monitor
Alias	IFR 1600S; Marconi 1600S; FM/AM-1600S; 1600S/CSA
RF Generator Frequency Range	400 kHz to 999.9999 MHz
RF Generator Resolution	100 Hz
TR Output Level Range	-137 dBm to 0 dBm into 50 ohm
Duplex Level Range	-120 dBm to +7 dBm into 50 ohm
Duplex Level Resolution	0.1 dB
TR Level Accuracy	plus/minus 1.5 dB (level greater than or equal to -110 dBm)
Harmonics	less than -26 dBc
Non Harmonics	less than -50 dBc
Residual FM	less than 10 Hz RMS (0.3 to 3 kHz BW)
SSB Phase Noise	less than -90 dBc/Hz (25 kHz offset)
Internal FM Deviation Range	100 Hz to 100 kHz
Internal AM Range	1 percent to 90 percent
AF Generator Frequency Range	10 Hz to 40 kHz
AF Generator Level Range	0.5 mV to 2.5 Vrms into 150 ohm
RF Counter Range	250 kHz to 999.99999 MHz
RF Power Meter Range	0.2 mW to 200 W (1.5 MHz to 1 GHz)
RF Power Meter Accuracy	plus/minus 10 percent plus/minus 2 counts
Spectrum Analyzer Frequency Range	400 kHz to 999.9999 MHz
Spectrum Span	1 kHz/div to 100 MHz/div plus zero scan
Displayed Dynamic Range	60 dB (0 dB atten; span less than 1 MHz/div)
Oscilloscope Vertical BW	1 MHz (-3 dB)

PARAMETER	VALUE
Oscilloscope Sweep	1 us/div to 100 ms/div
DVM Ranges	200 mV to 2000 V full scale
Ohmmeter Ranges	200 ohm to 20 Mohm
EVM Range	0 to 100 percent
Meter Residual EVM	less than 2 percent indication
Master Oscillator	10 MHz nominal
Temp Stability	plus/minus 0.01 ppm (0 to 50 C)
Ageing	plus/minus 0.1 ppm per year
Dimensions	477 mmWx 187 mmHx 635 mmDNet Weight: 21.8 kg (48 lb) without CSA; about 60 lb with CSA
Operating Temperature	0 to 50 C
Line Power	85-135 / 180-260 VAC; 50 to 400 Hz; 200 W maximum
Related CSA Option	CSA4 IS-54 GPIB UWC-136 TDMA 400 and 800 MHz
Related Conformance Software	AC1036

General Specifications & Supplementary Characteristics

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Related Conformance Software	AC1036 Notes RF/AF/analyzer rows from IFR FM/AM-1600S/CSA specifications sheet (46891-026 Revision A). Cellular protocol features depend on installed CSA/NAMPS options—confirm configuration before quoting TDMA conformance capability.

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

RF/AF/analyzer rows from IFR FM/AM-1600S/CSA specifications sheet (46891-026 Revision A). Cellular protocol features depend on installed CSA/NAMPS options—confirm configuration before quoting TDMA conformance capability.

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

788 S 500 E, Pleasant Grove, UT 84062
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<https://aumictechlabs.com>

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.