

ANRITSU

MS8604A

The Anritsu MS8604A is a high-performance Digital Mobile Transmitter Analyzer designed for evaluating the major characteristics of digital mobile communication transmitters. Operating over a broad frequency range from 100 Hz to 8.5 GHz, it supports major international wireless standards including GSM, DCS1800, PDC, PHS, NADC, and TETRA. With its high-speed measurement capability of executing modulation-accuracy tests in under 1 second, built-in 10 W power meter, and standard PTA (Personal Test Automation) programming, the MS8604A is highly optimized for transmitter manufacturing and testing.

SPECIFICATIONS

General

Interfaces	GPIO, RS-232
Display	Color TFT LCD
Programming Interface	PTA (Personal Test Automation) functions standard

Physical

Power Supply	100 V AC to 120 V AC / 200 V AC to 240 V AC, 47.5 Hz to 63 Hz
Operating Temperature	0 °C to 50 °C °C
Dimensions (W×H×D)	426 mm × 177 mm × 451 mm mm
Weight	24 kg

Frequency

Frequency Range	100 Hz to 8.5 GHz
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RF Input & Receiver

Maximum Safe Input Level	Up to 10 W (average burst power)
RF Input Attenuation	0 to 62 dB in 2 dB steps
Power Meter	Built-in for high power levels
Baseband Signal Input	I/Q signal input function (optional)

Signal Analysis & Measurement

Supported Modulation Formats	GMSK, $\pi/4$ DQPSK (universal analysis functions)
Measurement Speed	Under 1 second for modulation-accuracy measurements
Measurement Capabilities	Carrier frequency, modulation accuracy, antenna power, leakage power during carrier-off, transmission ramp-up and ramp-down power, occupied bandwidth (adjacent channel power, spurious emissions, and signal transmission rate)

Supported Technologies & Standards

Supported Cellular & Wireless Standards	GSM, DCS1800 (PCN), PDC, PHS, NADC, TETRA, digital MCA, CT2, DECT, WCPE, PACS, RCR STD-39
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Compliance & Calibration

Measurement Standards Compliance

EIA/TIA, ETSI, RCR, MKK

Spectrum Analyzer

Resolution Bandwidth (RBW) Range

300 Hz to 3 MHz (10 Hz to 3 MHz with Option 12)

Video Bandwidth (VBW) Range

1 Hz to 3 MHz

Sweep Time Range (Span > 0 Hz)

20 ms to 1000 s

Sweep Time Range (Zero Span)

50 μ s to 1000 s

SSB Phase Noise

≤ -100 dBc/Hz (at 10 kHz offset, carrier ≤ 3.0 GHz)

Reference Oscillator

Standard Reference Frequency

10 MHz

Standard Aging Rate

2×10^{-8} /day, 1×10^{-7} /year

Standard Temperature Stability

5×10^{-8} (0°C to 50°C)

RF Input

RF Input Connector Type

N (female)

RF Input Impedance

50 Ω

Receiver & RF Performance

YIG Preselector Frequency Range

1.7 GHz to 8.5 GHz

Storage & Connectivity

Memory Card Interface

Two PCMCIA Type II slots

Floppy Disk Drive

3.5-inch FDD (supports 2DD/2HD, MS-DOS format)

RS-232C Interface Connector

D-sub 9-pin

Rear Panel Outputs

IF Output, Video Output, VGA Output, Reference Output

Reference Frequency Options

Option 01 Reference Oscillator Aging

$\leq 5 \times 10^{-10}$ /day

Option 02 Reference Oscillator Aging

$\leq 2 \times 10^{-10}$ /day

Option 03 Reference Oscillator Aging

$\leq 2 \times 10^{-11}$ /day

Internal Power Meter

Power Meter Dynamic Range

-30 dBm to +20 dBm

Power Meter Calibration Accuracy

± 0.2 dB (at -10 dBm, 50 MHz)

External Power Sensor Compatibility

Anritsu MA4700 and MA4600 series power sensors

TECHNOLOGY

Digital Mobile Transmitter Analyzer

APPLICATIONS

Evaluation of transmitter characteristics in digital mobile communications

