ADVANTEST

R3273

The Advantest R3273 is a high-performance spectrum analyzer covering a wide frequency range from 100 Hz to 26.5 GHz. Designed to meet the stringent demands of 3rd Generation Mobile (IMT-2000), microwave digital broadcast, and high-speed multimedia mobile access, the R3273 features outstanding dynamic range, precise span accuracy, and optional digital modulation analysis capabilities.

SPECIFICATIONS

General

Interfaces	GPIB, RS-232, VGA out, Parallel (Centronics), PCMCIA Card Slot
Display	8.4-inch color TFT LCD

Physical

Power Supply	100 to 120 VAC / 220 to 240 VAC, 50/60 Hz, <= 350 VA
Operating Temperature	0°C to +50°C °C
Dimensions (W×H×D)	424 mm (W) x 177 mm (H) x 450 mm (D) mm
Weight	22 kg

Frequency Specifications

Frequency Range	100 Hz to 26.5 GHz
Dynamic Range in the 2 GHz Band	-145 dBc/Hz (typical)

Resolution and Video Bandwidths (RBW/VBW)

Resolution Bandwidth (RBW) Range	1 Hz to 10 MHz

Amplitude and Dynamic Range Specifications

W-CDMA ACP Measurement Performance	70 dB (typical, at 5 MHz offset)

Inputs and Outputs

RF Input Impedance	50 ohms
RF Input Connector Type	3.5 mm (female)

Measurement Capabilities and Software Options

Digital Demodulation Options	PHS, PDC, IS-136, DECT, GSM, GPRS, EDGE, IS-95, cdma2000, Bluetooth, W-CDMA (3GPP)
Occupied Bandwidth (OBW) Measurement	Supported (one-button measurement)
Adjacent Channel Power (ACP) Measurement	Supported (one-button measurement)
Channel Power Measurement	Supported (one-button measurement)

Interfaces and Data Storage

GPIB Interface	Standard (IEEE-488 compliant)
RS-232C Interface	Standard
External VGA Monitor Output	D-Sub 15-pin (standard)
Memory Card Slot	PCMCIA Type II (standard)

Physical and Environmental Specifications

Storage Temperature Range	-20°C to +60°C
Relative Humidity	85% or less (non-condensing)
Power Supply Frequency	50 Hz / 60 Hz

Performance

Displayed Average Noise Level (DANL)	-140 dBm (10 MHz to 3.0 GHz, RBW 10 Hz)
SSB Phase Noise	≤ -113 dBc/Hz (10 kHz offset, f ≤ 2.6 GHz)
Detection Modes	Normal, Positive Peak, Negative Peak, Sample, RMS
Third-Order Intercept (TOI)	+16 dBm (at 2 GHz)

Receiver/Input

Input Attenuator Range	0 to 75 dB in 5 dB steps
Maximum Safe RF Input Power	+30 dBm (average, RF attenuation ≥ 10 dB)

Sweep

Sweep Time (Span > 0 Hz)	20 ms to 1000 s
Sweep Time (Zero Span)	50 µs to 1000 s
Sweep Trigger Sources	Free Run, Line, External, Video, Gate
Number of Display Points	1001 points

Bandwidth

Video Bandwidth (VBW) Range	1 Hz to 10 MHz
EMI Filter Bandwidths (6 dB)	200 Hz, 9 kHz, 120 kHz, 1 MHz

Frequency Reference

Standard Reference Aging Rate	±2 × 10^-8 / day
Standard Reference Temperature Stability	±1 × 10^-7 (0 to 50 °C)
High Stability Reference Aging Rate	±5 × 10^-10 / day (Option 21)
External Reference Input Frequency	10 MHz
External Reference Input Level	-10 dBm to +10 dBm
Calibrator Output Frequency	20 MHz
Calibrator Output Level	-20 dBm ±0.3 dB

Trigger/Gate

Trigger Modes	Free Run, Line, External, Video, Gate

Power

Power Consumption	≤ 350 VA

Amplitude

Maximum DC Input Voltage	0 V

Interfaces

Keyboard Connector	6-pin mini-DIN (PS/2)
Printer Connector	25-pin D-sub (Centronics)
External Trigger Input Connector	BNC female
Gate Input Connector	BNC female

Options

Option 21	High Stability Reference Oscillator (aging ±5 x 10^-9/day)
Option 22	High Stability Reference Oscillator (aging ±2 x 10^-10/day)
Option 23	High Stability Reference Oscillator (aging ±5 x 10^-10/day)
Option 61	W-CDMA Demodulation Software
Option 62	cdmaOne Demodulation Software
Option 63	GSM/DCS1800/1900 Demodulation Software
Option 64	PDC/PHS/IS-136 Demodulation Software
Option 65	cdma2000 Demodulation Software

TECHNOLOGY

Superheterodyne Spectrum Analysis & Digital Modulation Analysis

APPLICATIONS

Research, development, production line testing, and deployment of RF and microwave communication devices, modules, and infrastructure equipment.

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.