

## KEYSIGHT TECHNOLOGIES (AGILENT HP)

# 4263B

The Keysight (Agilent/HP) 4263B is a highly reliable and cost-effective LCR meter designed for component evaluation on production lines and fundamental impedance testing for benchtop applications. Delivering a basic accuracy of 0.1% and high-speed measurements as fast as 25 ms, it is optimized for high-throughput environments. It measures 11 standard impedance parameters across five core test frequencies from 100 Hz to 100 kHz. An optional transformer measurement feature allows the evaluation of complex transformer parameters, while built-in comparator and contact check functions ensure robust production testing.

## SPECIFICATIONS

### General

|            |                           |
|------------|---------------------------|
| Interfaces | HP-IB (IEEE-488), Handler |
|------------|---------------------------|

### Physical

|                       |                                                       |
|-----------------------|-------------------------------------------------------|
| Power Supply          | 90 to 132 V / 198 to 264 V AC, 47 to 66 Hz, 45 VA max |
| Operating Temperature | 0 to 45 °C                                            |
| Dimensions (W×H×D)    | 320 × 100 × 300 mm                                    |
| Weight                | 4.5 kg                                                |

### Measurement Parameters

|                                     |                                                             |
|-------------------------------------|-------------------------------------------------------------|
| Primary & Secondary Parameters      | Z ,  Y , R, X, G, B, L, C, D, Q, $\theta$                   |
| Transformer Parameters (Option 001) | Turns Ratio (N), Mutual Inductance (M), DC Resistance (DCR) |
| Deviation Measurement               | $\Delta$ , $\Delta\%$                                       |

### Test Signal

|                                |                                                                 |
|--------------------------------|-----------------------------------------------------------------|
| Test Frequencies               | 100 Hz, 120 Hz, 1 kHz, 10 kHz, 100 kHz (20 kHz with Option 002) |
| Test Signal Voltage Range      | 20 mV to 1 Vrms                                                 |
| Test Signal Voltage Resolution | 5 mVrms                                                         |
| Internal DC Bias               | 1.5 V, 2.0 V                                                    |
| Test Signal Monitoring         | Actual AC voltage and current levels                            |

### Measurement Accuracy & Speed

|                          |                                 |
|--------------------------|---------------------------------|
| Basic Impedance Accuracy | 0.1%                            |
| Measurement Time (Fast)  | 25 ms                           |
| Averaging                | 1 to 256                        |
| Trigger Modes            | Internal, Manual, External, Bus |

### Calibration & Correction

|                         |                    |
|-------------------------|--------------------|
| Correction Functions    | Open, Short, Load  |
| Cable Length Correction | 0 m, 1 m, 2 m, 4 m |

**Features & Analysis**

|                        |                          |
|------------------------|--------------------------|
| Comparator Function    | High, In, Low            |
| Contact Check Function | High-speed contact check |
| Memory/Save States     | 10 measurement setups    |

**Physical & Terminals**

|                       |                       |
|-----------------------|-----------------------|
| Measurement Terminals | 4-terminal pair (BNC) |
|-----------------------|-----------------------|

**Options**

|            |                            |
|------------|----------------------------|
| Option 002 | Adds 20 kHz test frequency |
|------------|----------------------------|

**Power & Environmental**

|                   |                                |
|-------------------|--------------------------------|
| Line Voltage      | 100 / 120 / 220 / 240 VAC ±10% |
| Line Frequency    | 47 Hz to 66 Hz                 |
| Power Consumption | 45 VA maximum                  |

**Performance**

|                            |                           |
|----------------------------|---------------------------|
| Measurement Time (Medium)  | 65 ms                     |
| Measurement Time (Slow)    | 500 ms                    |
| Measurement Delay Time     | 0 to 9999 ms (1 ms steps) |
| Test Signal Level Accuracy | ±(10% + 3 mV)             |

**Configuration & Control**

|                         |                    |
|-------------------------|--------------------|
| Internal DC Bias Levels | 1.5 V, 2.0 V       |
| Cable Length Settings   | 0 m, 1 m, 2 m, 4 m |

**Measurement Ranges**

|                             |                  |
|-----------------------------|------------------|
| Measurement Range (R, Z, X) | 1 mΩ to 100 MΩ   |
| Measurement Range (C)       | 1 pF to 1 F      |
| Measurement Range (L)       | 10 nH to 100 kH  |
| Measurement Range (D)       | 0.0001 to 9.9999 |
| Measurement Range (Q)       | 0.1 to 9999.9    |
| Measurement Range (θ)       | -180° to +180°   |

**Environmental**

|                    |              |
|--------------------|--------------|
| Operating Altitude | Up to 2000 m |
|--------------------|--------------|

**TECHNOLOGY**

Impedance Measurement

**APPLICATIONS**

LCR and Transformer Testing

