

## KEYSIGHT TECHNOLOGIES (AGILENT HP)

# 8665B

The Keysight (formerly Agilent / HP) 8665B is a high-performance RF signal generator operating from 100 kHz up to 6 GHz. It is designed for demanding out-of-channel receiver testing and high-speed digital communications applications. The instrument features exceptionally low phase noise (especially when equipped with Option 004), high-rate FM capabilities, and versatile internal modulation. It can also function as a comprehensive radar test source with the addition of Option 008 for pulse modulation.

## SPECIFICATIONS

### Frequency

|                      |            |
|----------------------|------------|
| Minimum Frequency    | 100 kHz Hz |
| Maximum Frequency    | 6 GHz Hz   |
| Frequency Resolution | 0.01 Hz    |

### Output

|                      |                                                                                  |
|----------------------|----------------------------------------------------------------------------------|
| Maximum Output Power | +13 dBm (< 3 GHz), +8 dBm (3 to 6 GHz) dBm                                       |
| Output Power Range   | +13 dBm to -119.9 dBm (0.1 to 3000 MHz); +8 dBm to -119.9 dBm (3000 to 6000 MHz) |

### General

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Reference Oscillator | 10 MHz (Option 001 available for high stability) |
| Interfaces           | HP-IB (IEEE-488)                                 |

### Physical

|              |                                                                           |
|--------------|---------------------------------------------------------------------------|
| Power Supply | 100, 120, 220, 240 Vac; 50/60 Hz (400 Hz at 100/120 Vac only); 550 VA max |
| Weight       | 35 kg                                                                     |

### Spectral Purity

|                       |                                                 |
|-----------------------|-------------------------------------------------|
| Sub-harmonic Spurious | None (< 3000 MHz); < -40 dBc (3000 to 6000 MHz) |
|-----------------------|-------------------------------------------------|

### Frequency Modulation (FM)

|                          |              |
|--------------------------|--------------|
| FM 3 dB Bandwidth (Rate) | Up to 2 MHz  |
| Maximum Peak Deviation   | Up to 20 MHz |

### Options and Hardware Configurations

|                       |            |
|-----------------------|------------|
| Low-Noise Enhancement | Option 004 |
| Pulse Modulation      | Option 008 |

**RF Output**

|                          |                                |
|--------------------------|--------------------------------|
| Output Impedance         | 50 $\Omega$ nominal            |
| RF Output Connector      | Type-N (female)                |
| Reverse Power Protection | 50 W from a 50 $\Omega$ source |

**Amplitude Modulation**

|                            |               |
|----------------------------|---------------|
| Amplitude Modulation Depth | 0 to 100%     |
| Amplitude Modulation Rate  | dc to 100 kHz |

**Performance**

|                      |        |
|----------------------|--------|
| Amplitude Resolution | 0.1 dB |
|----------------------|--------|

**Inputs & Outputs**

|                                      |                    |
|--------------------------------------|--------------------|
| External Reference Input Frequencies | 1, 2, 5, or 10 MHz |
| Internal Reference Output Frequency  | 10 MHz             |

**Environmental**

|                       |                  |
|-----------------------|------------------|
| Operating Temperature | 0 °C to +55 °C   |
| Storage Temperature   | -40 °C to +71 °C |

**TECHNOLOGY**

RF

**APPLICATIONS**

Receiver Testing, Radar Testing

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