Quick Fact Sheet

Bluetooth® Test Set MT8852B

Supports Basic Rate, EDR and low energy measurements



MT8852B

2.40 GHz to 2.5 GHz

The Anritsu MT8852B Bluetooth Test Set is the market leading RF measuring instrument for design proving and production test of a wide range of products that integrate Bluetooth technology, including; phones, headsets, computers, audio-visual and gaming products as well as modules. In production, a single key press initiates a measurement script that tests a device in less than 10 seconds.

Eight Bluetooth Basic Rate and six Bluetooth EDR transmitter and receiver test cases are supported in the MT8852B Bluetooth Test Set. EDR test cases supported include Relative Transmit Power, Carrier Frequency Stability/ Modulation Accuracy, Differential Phase Encoding, Sensitivity, and BER Floor Performance.

Key Features

- Compliant with Bluetooth 1.2, 2.0 and 2.1, 3.0+HS and 4.0 core specification
- Measurements performed as defined in the Bluetooth RF Test Specification
- > Qualified by Bluetooth SIG for RF measurements
- Initialization and control of test devices through USB and UART HCI control port
- > Option for Bluetooth low energy measurements
- > Built in support for Bluetooth low energy 2-Wire control interface
- > Single script runs Basic Rate, EDR and low energy tests
- > BR/EDR/low energy dirty transmitter for receiver sensitivity test cases



- Audio testing capability. 3 SCO channels with CVSD, u-Law and A-Law air interface
- > Tests through antenna interface or cable connection
- > Pre-programmed or user-defined test scripts
- > BlueSuite Pro3 software provides graphical traces of modulation, power ramp, individual channel measurements, and receiver sensitivity search
- > BlueTest 2 and CombiTest software for automated high volume production line testing
- Adaptive Frequency Hopping software option for Bluetooth 1.2 device testing



Bluetooth® Test Set MT8852B

Supports Basic Rate, EDR and low energy measurements



Key Specifications

| Signal Generator | |
|-----------------------------|---|
| Frequency | |
| Frequency range | 2.40 to 2.5 GHz |
| Frequency resolution | 1 kHz |
| Frequency accuracy | As frequency standard ±500 Hz |
| Level | |
| Amplitude range | 0 dBm to –90 dBm |
| Amplitude accuracy | ±1 dB (0 dBm to -80 dBm) |
| Amplitude resolution | ±0.1 dB |
| Output impedance | 50 Ω (nominal) |
| Output VSWR | 1.5:1 (typically 1.3) Adjacent channels 3 or higher –40 dBc |
| GFSK modulation | |
| Modulation index | Variable, 0.25 to 0.50 (125 kHz to 250 kHz) |
| Modulation index resolution | 0.01 |
| Modulation index accuracy | 1% for Modulation Index = 0.32 |
| Baseband filter | BT=0.5 |
| π/4DQPSK modulation | |
| Modulation index accuracy | <5% RMS DEVM |
| Baseband filter | BT=0.4 |
| 8DPSK modulation | |
| Modulation index accuracy | <5% RMS DEVM |
| Baseband filter | BT=0.4 |
| Measuring Receiver | |
| Frequency | |
| Frequency range | 2.40 to 2.5 GHz |
| Frequency resolution | 1 kHz |
| Frequency accuracy | As frequency standard ±500 Hz |
| Level | |
| Range | +22 dBm to -55 dBm average power |
| Power measurement accuracy | ±1 dB (+20 dBm to -35 dBm) |
| Input VSWR | 1.5:1 |
| Damage level | +25 dBm |
| Resolution | 0.1 dB |
| GFSK modulation | |
| Deviation measurement range | 0 to 350 kHz peak |
| Accuracy | 1% for Modulation Index = 0.32 |
| | continued |

| Control Interface | | |
|--|--|--|
| The EUT control interface provides RS232 HCl commands to the EUT through a standard RS-232 interface. The interface meets the requirements of the Bluetooth specification for HCl UART transport layer. A RS232 cable is supplied. | | |
| The EUT control interface provides USB HCI commands to the EUT through a standard USB interface. The interface meets the requirements of the Bluetooth specification section H:2. A USB cable is supplied. | | |
| For test control of Bluetooth low energy devices the EUT control interface supports the 2-Wire specification | | |
| General Specifications | | |
| Operating Temperature 5 °C to +40 °C, humidity 20% - 75% | | |
| 85 to 264 Volts AC | | |
| 216.5 mm x 88 mm x 380 mm (8.5 in. x 3.5 in x 15 in.) | | |
| <3.45 kg (7.6 lbs) | | |
| | | |

Standard Accessories

| - MT8852B operation manual | RS 232 cable for firmware updates |
|---|---|
| - MT8852B remote programming manual | Power cord for destination country |
| - BlueSuite software (standard version) | Certificate of calibration |
| - RS 232 HCI control interface lead | – 3.5 mm jack plugs (qty 3) Audio versions only |
| - USB HCI control interface lead | BlueTest2 software |

Options

| Part Number | Description |
|-------------|--|
| MT8852B-001 | Rack mount kit, single unit |
| MT8852B-003 | Rack mount kit, side by side |
| MT8852B-014 | Headset and Hands-free profile emulator software |
| MT8852B-015 | Adaptive frequency hopping option |
| MT8852B-017 | IQ data output |
| MT8852B-027 | Bluetooth low energy measurements |
| MT8852B-319 | Retrofit Audio to MT8852B |
| MT8852B-325 | Retrofit EDR to MT8852B |
| MT8852B-330 | Retrofit Basic Rate measurements to MT8852B-043 |
| MT8852B-098 | Standard calibration ANSI/NCSL Z540 |
| MT8852B-099 | Premium calibration ANSI/NCSL Z540 |
| MX885201B | BlueSuite Pro3 software application |

Accessories

| 2000-1613-R | Bluetooth antenna and adaptor |
|-------------|-------------------------------|
| D41310 | Soft carry bag |

Pricing Ordering Training Support

www.anritsu.com or 1-800-267-4878