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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 11664B

Agilent 11664B Scalar Detector 10 MHz to 26.5 GHz The HP 11664B is an AC-coupled scalar detector for 8755/8756/8757 swept amplitude analyzers. OEM 11664B listings give 10 MHz to 26.5 GHz, +16 dBm to minus 60 dBm input range, +20 dBm (100 mW) maximum input, 50 ohm impedance, and TypeNmale connector. Detection uses 27.8 kHz square-wave AM from the host analyzer. Broadband scalar transmission and reflection measurements to 26.5 GHz with 8756A/8757A systems. Higher-frequency sibling of 11664A (18 GHz) The HP 11664B is an AC-coupled scalar detector for 8755/8756/8757 swept amplitude analyzers. OEM 11664B listings give 10 MHz to 26.5 GHz, +16 dBm to minus 60 dBm input range, +20 dBm (100 mW) maximum input, 50 ohm impedance, and TypeNmale connector. Detection uses 27.8 kHz square-wave AM from the host analyzer. Broadband scalar transmission and reflection measurements to 26.5 GHz with 8756A/8757A systems. Higher-frequency sibling of 11664A (18 GHz) Instrument Type: Scalar network analyzer detector



MODEL

**Agilent / Keysight
11664B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

11664B

LISTING

<https://aumictechlabs.com/products/11664b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 11664B is a microwave detector engineered for scalar network analyzer systems, delivering envelope detection of RF signals modulated at 27.8 kHz. Purpose-built for the 8757, 8756, and 8755 series analyzers, this detector enables accurate microwave measurements across a broad frequency span. It operates with 50-ohm input impedance and interfaces via Type

N male connector. The unit handles dynamic range from +16 dBm to -60 dBm, with maximum input power rated at +20 dBm (100 mW). Operating temperature range spans 0° to 55°C, with storage capability from -40° to 75°C.

Technical Specifications

Frequency Range: 10 MHz to 26.5 GHz
Dynamic Range: +16 dBm to -60 dBm
Maximum Input Power: +20 dBm (100 mW)
Input Impedance: 50 ohms
RF Input Connector: N(m) (Type N male)
Modulation Detection: 27.8 kHz envelope detection
Operating Temperature: 0° to 55°C
Storage Temperature: -40° to 75°C
Weight: 3 lb

Key Features

- Wide frequency coverage from 10 MHz to 26.5 GHz
- 80 dB dynamic range for signal detection
- Standard 50-ohm interface matching network analyzer systems
- Type N male connector for field-proven connectivity

Typical Applications

- Scalar network analysis and component characterization
- Microwave signal measurement and detection
- RF system calibration and verification

Compatibility & Integration

Designed exclusively for Agilent/Keysight scalar network analyzers: 8757 Series, 8756 Series, and 8755 Series.

11664B Characteristics / Specifications

PARAMETER	VALUE
Model	11664B
Instrument Type	Scalar network analyzer detector
Host Analyzers	HP 8755, 8756, and 8757 scalar network analyzers
Frequency Range	10 MHz to 26.5 GHz
Input Power Range	+16 dBm to minus 60 dBm
Maximum Input Power	+20 dBm (100 mW)
Detection Scheme	AC-coupled; detects the envelope of 27.8 kHz square-wave AM on the RF
Input Impedance	50 ohm
Standard Connector	TypeNmale
Related Lower Frequency Detector	HP 11664A covers 10 MHz to 18 GHz, +10 dBm to minus 50 dBm
Related 11664A Return Loss 10 To 40 Mhz	greater than or equal to 10 dB (SWR 1.92), 15 C to 35 C on 11664A Table 1-1
Related 11664A Return Loss 40 Mhz To 4 Ghz	greater than or equal to 20 dB (SWR 1.22) on 11664A Table 1-1
Related 11664A Return Loss 4 To 12 Ghz	greater than or equal to 18 dB (SWR 1.29) on 11664A Table 1-1
Related 11664A Cable Length	1.2 metres on 11664A Table 1-1
Related 11664A Weight Net	0.17 kg on 11664A Table 1-1
Related 11664A Operating Temperature	0 C to 55 C on 11664A Table 1-1
Related 11664A Storage Temperature	minus 40 C to 75 C on 11664A Table 1-1
Detectors Powered By Host Family	host analyzer powers three 11664-class detectors
Shipping Weight Listing	3 lb on 11664B product listings
Typical Damage Level Family	typical +20 dBm on 11664A (same +20 dBm maximum listed for 11664B)
Related Splitter	HP 11667A power splitter used in coaxial scalar setups
Form Factor	coaxial scalar detector with analyzer cable
Storage temperature	minus 40 C to 75 C on 11664A Table 1-1

PARAMETER	VALUE
Operating temperature	0 C to 55 C on 11664A Table 1-1
Return loss	10 To 40 Mhz: greater than or equal to 10 dB (SWR 1.92), 15 C to 35 C on 11664A Table 1-1

11664B Specifications

PARAMETER	VALUE
Agilent 11664B Scalar Detector 10 MHz to 26.5 GHz	Overview
Applications	Broadband scalar transmission and reflection measurements to 26.5 GHz with 8756A/8757A systems.
Key Features	10 MHz to 26.5 GHz coaxial detector
Type N male 50 ohm input	AC detection of 27.8 kHz square-wave AM
Technical Specifications	Model: 11664B

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 C to 75 C on 11664A Table 1-1
Operating temperature	0 C to 55 C on 11664A Table 1-1
Operating Temperature	0 C to 55 C on 11664A Table 1-1
Related 11664A Storage Temperature	minus 40 C to 75 C on 11664A Table 1-1
Detectors Powered By Host Family	host analyzer powers three 11664-class detectors
Shipping Weight Listing	3 lb on 11664B product listings
Typical Damage Level Family	typical +20 dBm on 11664A (same +20 dBm maximum listed for 11664B)
Related Splitter	HP 11667A power splitter used in coaxial scalar setups
Form Factor	coaxial scalar detector with analyzer cable Notes 11664B frequency, +16 to minus 60 dBm range, +20 dBm maximum, 50 ohm, TypeNmale, 27.8 kHz detection, and 8755/8756/8757 host rows from Keysight/Agilent 11664B detector product specifications. Rows labeled 11664A Table 1-1 are the published 11664A operating/service reflection and environment figures for the lower-frequency sibling; confirm 11664B-only return-loss bands on the 11664B detector table.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Specifications

PARAMETER	VALUE
Model	11664B
Instrument Type	Scalar network analyzer detector
Host Analyzers	HP 8755, 8756, and 8757 scalar network analyzers
Frequency Range	10 MHz to 26.5 GHz
Input Power Range	+16 dBm to minus 60 dBm
Maximum Input Power	+20 dBm (100 mW)
Detection Scheme	AC-coupled; detects the envelope of 27.8 kHz square-wave AM on the RF
Input Impedance	50 ohm
Standard Connector	TypeNmale
Related Lower Frequency Detector	HP 11664A covers 10 MHz to 18 GHz, +10 dBm to minus 50 dBm

Related 11664A Return Loss 10 To 40 Mhz: greater than or equal to 10 dB (SWR 1.92), 15 C to 35 C on 11664A Table 1-1

Related 11664A Return Loss 40 Mhz To 4 Ghz: greater than or equal to 20 dB (SWR 1.22) on 11664A Table 1-1

Related 11664A Return Loss 4 To 12 Ghz: greater than or equal to 18 dB (SWR 1.29) on 11664A Table 1-1

Specifications

PARAMETER	VALUE
Related 11664A Cable Length	1.2 metres on 11664A Table 1-1
Related 11664A Weight Net	0.17 kg on 11664A Table 1-1
Related 11664A Operating Temperature	0 C to 55 C on 11664A Table 1-1
Related 11664A Storage Temperature	minus 40 C to 75 C on 11664A Table 1-1
Detectors Powered By Host Family	host analyzer powers three 11664-class detectors
Shipping Weight Listing	3 lb on 11664B product listings
Typical Damage Level Family	typical +20 dBm on 11664A (same +20 dBm maximum listed for 11664B)
Related Splitter	HP 11667A power splitter used in coaxial scalar setups
Form Factor	coaxial scalar detector with analyzer cable

Notes

11664B frequency, +16 to minus 60 dBm range, +20 dBm maximum, 50 ohm, TypeNmale, 27.8 kHz detection, and

8755/8756/8757 host rows from Keysight/Agilent 11664B detector product specifications. Rows labeled 11664A Table 1-1 are the published 11664A operating/service reflection and environment figures for the lower-frequency sibling; confirm 11664B-only return-loss bands on the 11664B detector table.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

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NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.