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Data Sheet

August 7, 2026

KEYSIGHT

Keysight (Agilent) 85106C Millimeter-Wave Network Analyzer Subsystem, 33 GHz to 110 GHz

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The Keysight/Agilent/HP 85106C is a rack-mounted millimeter-wave vector network analyzer subsystem based on the 8510C analyzer. It extends S-parameter measurements into waveguide bands from 33 GHz to 110 GHz (Q/U/V/W). Typical hardware includes the 8510C, 85105A millimeter-wave test-set controller, dual synthesized sources, and banded 85104A-series waveguide test-set modules with 11644A-series waveguide calibration kits (TRL). Successor configurations are often documented as 85106D with equivalent waveguide coverage. The Keysight/Agilent/HP 85106C is a rack-mounted millimeter-wave vector network analyzer subsystem based on the 8510C analyzer. It extends S-parameter measurements into waveguide bands from 33 GHz to 110 GHz (Q/U/V/W). Typical hardware includes the 8510C, 85105A millimeter-wave test-set controller, dual synthesized sources, and banded 85104A-series waveguide test-set modules with 11644A-series waveguide calibration kits (TRL). Successor configurations are often documented as 85106D with equivalent waveguide coverage. Millimeter-wave component and subsystem S-parameter characterization; waveguide device development; broadband mm-wave R&D where coax ends and waveguide bands begin.

No photo

MODEL Keysight 85106C	CALIBRATION N/A — off-catalog OEM datasheet
CONDITION See OEM documentation	STATUS Not listed on Aumictech inventory
RFQ / SKU 85106C	LISTING Off-catalog — OEM datasheet only

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

Features & description

From manufacturer datasheet

Features

- Frequency coverage: 33 GHz to 110 GHz in four waveguide bands
- Bands: WR-22 Q (33–50 GHz); WR-19 U (40–60 GHz); WR-15 V (50–75 GHz); WR-10 W (75–110 GHz)
- Core analyzer: 8510C VNA with modular source/test-set architecture
- Test-set controller: 85105A (mm-wave IF/RF switching; Opt 050 for 50 GHz source switch)
- Sources (typical system): dual 83621B synthesized sweepers (0.045–20 GHz class drive)
- Test modules (order by band): Q85104A, U85104A, V85104A, W85104A (two modules per complete S-parameter set)
- Calibration: 11644A-series waveguide kits; TRL two-port calibration
- System dynamic range (transmission, typical 8510C mm-wave configuration): 87 dB (33–50 GHz), 87 dB (40–60 GHz), 75 dB (50–75 GHz), 76 dB (75–110 GHz)
- Receiver dynamic range (same bands, typical): 99 / 97 / 85 / 79 dB
- Reference power at port 1 (nominal): 0 / 0 / 0 / –3 dBm by band
- Max power measured at port 2 (typical): +12 / +10 / +10 / 0 dBm by band
- Min power measured at port 2 (typical): –87 / –87 / –75 / –79 dBm by band
- Factory-integrated rack system with system verification prior to shipment (85106 family)
- Related options historically: low-frequency coax extension (adds 8517B path), high-stability / high-power configurations, Opt 010 time domain on 8510C

85106C Characteristics / Specifications

PARAMETER	VALUE
Model	85106C
Manufacturer	Keysight Technologies (Agilent / HP)
Instrument Type	Millimeter-Wave Network Analyzer Subsystem
Family	8510C / 85106 Series
Alias	85106C; Agilent 85106C; HP 85106C Frequency / Bands 33–110 GHz waveguide (Q/U/V/W); system DR ~75–87 dB class by band Operational Notes Prefer Agilent 8510C family data (5091-8484E / 5091-8967E) and 85106C/D product overview. Exact band modules and sources must match the configured rack; finer limits belong on the system verification data sheet for the installed modules.
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85106C Specifications

PARAMETER	VALUE
Key Features	- Frequency coverage: 33 GHz to 110 GHz in four waveguide bands
Technical Specifications	Model: 85106C
Frequency / Bands	33–110 GHz waveguide (Q/U/V/W); system DR ~75–87 dB class by band

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

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Operational Notes

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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: N/A — off-catalog OEM datasheet. See OEM documentation · Not listed on Aumictech inventory.

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

Aumictech

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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.