

KEYSIGHT TECHNOLOGIES (AGILENT HP)

86112A

The Keysight (Agilent) 86112A is a dual-channel electrical receiver plug-in module designed for the Infiniium DCA (86100A/B/C) series sampling oscilloscopes. It features user-selectable bandwidths of 12.4 GHz or 20 GHz, combining high-fidelity waveform analysis with excellent noise performance for small signals.

SPECIFICATIONS

General

Interfaces	2x 3.5 mm (f) RF inputs, proprietary mainframe backplane connector
Display	None (uses mainframe display)
Recommended Calibration Cycle	1 year

Physical

Power Supply	Powered directly by the host mainframe slot
Operating Temperature	10 to 40 °C °C
Weight	1.2 kg kg

Input Channel Specifications

Number of Channels	2
Connector Type	3.5 mm (female)
Input Impedance	50 Ω nominal
Coupling	DC
Maximum Input Voltage	± 2 Vdc

Bandwidth & Rise Time

Analog Bandwidth (Low BW Mode)	12.4 GHz
Analog Bandwidth (High BW Mode)	20 GHz
Calculated Rise Time (10% to 90%, Low BW Mode)	28.2 ps
Calculated Rise Time (10% to 90%, High BW Mode)	17.5 ps

Vertical & Noise Performance

Characteristic RMS Noise (Low BW Mode)	0.25 mV
Characteristic RMS Noise (High BW Mode)	0.5 mV
Maximum RMS Noise (Low BW Mode)	0.5 mV
Maximum RMS Noise (High BW Mode)	1.0 mV
Vertical Scale Factor Range	1 mV/div to 100 mV/div

Mainframe Compatibility & Power

Compatible Oscilloscope Mainframes	86100A, 86100B, 86100C Infiniium DCA/DCA-J
Slot Occupancy Requirements	Single slot

Environmental & Reliability

Storage Temperature Range	-40 °C to +70 °C
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Compliance & Calibration

Recommended Warm-Up Time	1 hour
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Performance

Vertical Offset Range	±500 mV
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Electrical Input

Nominal Reflections (Low BW Mode)	5% (for <= 12.4 GHz)
Nominal Reflections (High BW Mode)	13% (for <= 20 GHz)
Maximum Safe RF Input Power	16 dBm
Dynamic Range	±400 mV (relative to channel offset)

TECHNOLOGY

Sampling Oscilloscope

APPLICATIONS

High-speed electrical waveform characterization and digital communications analysis

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