

KEYSIGHT TECHNOLOGIES (AGILENT HP)

86100C

The Keysight (Agilent) 86100C Infiniium DCA-J is a wide-bandwidth digital communications analyzer and sampling oscilloscope mainframe. When configured with up to two plug-in modules, it provides bandwidths in excess of 80 GHz, delivering precise waveform measurements, automated eye diagram analysis, high-precision TDR/TDT for impedance characterization, and industry-leading jitter analysis. It is designed for optical and electrical transmitter compliance testing and high-speed digital analysis.

SPECIFICATIONS

General

Display	10.4-inch color TFT LCD with touch screen
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Physical

Power Supply	115/230 VAC, 48-66 Hz, 540 W Max
Operating Temperature	10 °C to 40 °C °C

Mainframe Characteristics

Module Slots	2 (accepts 86100 series plug-in modules)
Operating System	Windows XP Professional
Display Size	10.4 in
User Interface	Touch screen, front panel knobs/buttons, external mouse and keyboard supported
Active Probing Compatibility	Supports InfiniiMax probes via N1022A probe adapter

Vertical System (Electrical/Optical)

Vertical Resolution	14-bit A/D converter
Maximum Input Power / Voltage	Module dependent

Trigger System

Pattern Lock	Supported (enables single-valued waveform viewing at highest bit rates)
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Eye / Pattern Mode Measurements

Extinction Ratio	Supported (module dependent)
Eye Height	Supported
Eye Width	Supported
Crossing Percentage	Supported
Q-Factor	Supported
Jitter (Peak-to-Peak)	Supported
Jitter (RMS)	Supported
Signal-to-Noise Ratio (SNR)	Supported
Waveform Equalization	Supported (on-board algorithms for capturing closed eyes)

Advanced Jitter Analysis (Option)

Total Jitter (TJ)	Supported (with Option 200 Advanced Jitter Analysis)
Random Jitter (RJ)	Supported (with Option 200 Advanced Jitter Analysis)
Deterministic Jitter (DJ)	Supported (with Option 200 Advanced Jitter Analysis)
Data Dependent Jitter (DDJ)	Supported (with Option 200 Advanced Jitter Analysis)
Duty Cycle Distortion (DCD)	Supported (with Option 200 Advanced Jitter Analysis)
Periodic Jitter (PJ)	Supported (with Option 200 Advanced Jitter Analysis)
Sub-Rate Jitter (SRJ)	Supported (with Option 200 Advanced Jitter Analysis)
Inter-Symbol Interference (ISI)	Supported (with Option 200 Advanced Jitter Analysis)

TDR / TDT Mode (Time Domain Reflectometry)

Impedance Measurement Range	Supported (with TDR module)
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Input / Output Interfaces

GPIB (IEEE-488)	Standard
LAN Configuration	10/100Base-T Ethernet
USB Ports (Host/Device)	USB 2.0 Standard
External Video Monitor Output	VGA
Serial Port (RS-232)	Standard

Environmental

Storage Temperature	-40 °C to 70 °C
Operating Altitude	Up to 4,600 m (15,000 ft)

Performance

Record Length	16 to 16,384 points per waveform
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Options

Option 200	Enhanced Jitter Analysis
Option 202	Enhanced Impedance and S-Parameter Analysis
Option 300	Advanced Amplitude Analysis
Option 090	Removable Hard Drive
Option 201	Advanced Waveform Analysis Software
Option 400	PLL and Jitter Spectrum Measurement Software

TECHNOLOGY

Digital Sampling Oscilloscope / Digital Communications Analyzer

APPLICATIONS

Transmitter compliance testing, high-speed digital design, optical network test, TDR/TDT impedance analysis, advanced jitter 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.