infiniium DCA Agilent 86100A/B Series Plug-in Modules Installation Guide





**Agilent Technologies** 

## Installation Instructions

This plug-in module is designed for use with the Infiniium DCA Agilent 86100A/B wide-bandwidth oscilloscope.

## To install the module into the Infiniium DCA

1 Slide the module into an available front-panel slot.

You can remove or install a module while the instrument is in operation.

2 Finger tighten the two knurled screws on the module's front panel.

Up to two modules can be inserted into the Infiniium DCA. All documentation (including specifications) for this plug-in module is located in the Infiniium DCA built-in information system (online help). To access the online help, touch or click Contents on the Help menu.



## Using an Agilent 86100A

The following modules require that firmware revision A.03.04 or later be installed in the Agilent 86100A/B:

83494A, Option 103 and Option 107 86102A

86103B 86105B 86107A 86111A 86111U 86113A 86115B 86116A 86116B 86117A 86117B 86117B 86118A

The firmware upgrade is enclosed in the module shipping container.

Agilent recommends that you use the latest version of firmware. To learn more about firmware upgrades, available modules, or the Infiniium DCA, please visit our website at http://www.agilent.com/comms/dca.

## General Safety Considerations

	This product has been designed and tested in accordance with IEC Publica- tion 1010, Safety Requirements for Electronic Measuring Apparatus, and has been supplied in a safe condition. The instruction documentation contains information and warnings which must be followed by the user to ensure safe operation and to maintain the product in a safe condition. Install the plug-in module according to the enclosure protection provided.	
	This instrument does not protect against the ingress of water. This instrument protects against finger access to hazardous parts within the enclosure.	
WARNING	If this product is not used as specified, the protection provided by the equipment could be impaired. This product must be used in a normal condition (in which all means for protection are intact) only.	
WARNING	No operator serviceable parts inside. Refer servicing to qualified service personnel. To prevent electrical shock do not remove covers.	
WARNING	To prevent electrical shock, disconnect the instrument from mains before cleaning. Use a dry cloth or one slightly dampened with water to clean the external case parts. Do not attempt to clean internally.	
CAUTION	This product is designed for use in Installation Category II and Pollution Degree 2 per IEC 1010 and 664 respectively.	

CAUTION	Electrical channel input circuits and the trigger input circuit can be damaged
	by electrostatic discharge (ESD). Therefore, avoid applying static discharges
	to the front-panel input connectors. Prior to connecting any coaxial cable to
	the connectors, momentarily short the center and outer conductors of the
	cable together. Avoid touching the front-panel input connectors without first
	touching the frame of the instrument. Be sure that the instrument is properly
	earth-grounded to prevent buildup of static charge. Wear a wrist-strap or heel-
	strap.

# **CAUTION** Optical channel fiber-optic connectors are easily damaged when connected to dirty or damaged cables and accessories. When you use improper cleaning and handling techniques, you risk expensive instrument repairs, damaged cables, and compromised measurements. Before you connect any fiber-optic cable to the Infiniim DCA, Chapter 1 in the Infiniium DCA's Quick Start Guide.

# Declaration of Conformity

DECLARATION OF CONFORMITY According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014			
Manufacturer's Name: Manufacturer's Address:	Agilent Technologies, Inc. 1400 Fountaingrove Parkway Santa Rosa, CA 95403-1799 USA		
Declares that the products:			
Product Name:	Infiniium DCA Agilent 86100-series plug-in modules		
Model Number:	86101A, 86102A, 86102U, 86103A, 86103B, 86105A, 86105B, 86106A, 86106B, 86107A, 86109A, 86109B, 86111A, 86111U, 86112A, 86113A, 86115B, 86116A, 86116B, 86117A, 86117B, 86118A		
Product Options:	This declaration covers all options of the above products.		
Is in conformity with: Safety: IEC 61010-1:1990 +A1 CAN/CSA-C22.2 No. 1	:1992+A2:1995 / EN 61010-1:1994+A2:1995 010.1-92		
EMC: CISPR 11:1990/EN 55011:1991 Group 1, Class A IEC 61000-4-2:1995+A1:1998 / EN 61000-4-2:1995, 4 kV CD, 8 kV AD IEC 61000-4-3:1995 / EN 61000-4-3:1995, 3 V/m, 80-1000 MHz IEC 61000-4-4:1995 / EN 61000-4-4:1995, 0.5 kV sig. lines, 1 kV pow. lines IEC 61000-4-5:1995 / EN 61000-4-5:1995, 0.5 kV I-I, 1 kV I-e IEC 61000-4-6:1996 / EN 61000-4-6:1996, 3V 80% AM, power line IEC 61000-4-11:1994 / EN 61000-4-11:1994, 100 %, 20 ms			
Supplementary Information: The products herewith comply with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and carry the CE-marking accordingly.			
	they Pleiff		
Santa Rosa, CA, USA 09 September 2002 Greg Pfeiffer/Quality Engineering Manager			
For further information, please contact your local Agilent Technologies sales office, agent or distributor.			

## **Regulatory Information**

# Radio-Frequency Electromagnetic Field Immunity - IEC 61000-4-3: 1995 passes criterion B

According to IEC 61000-4-3: 1995, degradation of system noise performance may be observed in some narrow frequency ranges when a 3 V/m radio-frequency electromagnetic field is applied to the 86100A,B mainframe with an 86102U, 86106B, or 86107A module installed.

# Radio-Frequency Electromagnetic Field Immunity - IEC 61000-4-3: 1995 passes criterion C

According to IEC 61000-4-3: 1995, the degradation of normal performance within the specification limits may be observed in the 86100A,B mainframe with an 86107A module installed. The instrument software recognizes this temporary signal degradation and warns the user that the data is suspect. The warning prompts the user to press the Clear Display button. The user can then resume data acquisition. This required operator intervention results in a criterion C classification.

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## **Safety Notices**

#### CAUTION

Caution denotes a hazard. It calls attention to a procedure which, if not correctly performed or adhered to, could result in damage to or destruction of the product. Do not proceed beyond a caution sign until the indicated conditions are fully understood and met.

#### WARNING

Warning denotes a hazard. It calls attention to a procedure which, if not correctly performed or adhered to, could result in injury or loss of life. Do not proceed beyond a warning sign until the indicated conditions are fully understood and met.