

Advisor Mainframe Features

# System Guide



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Before you use this instrument, read the "General Safety Precautions" and "Additional Safety Information" sections. Failure to comply with the precautions or with specific warnings in this book violates safety standards of design, manufacture, and intended use of this instrument. Agilent Technologies assumes no liability for the customer's failure to comply with these requirements.

#### **General Safety Precautions**

The following warnings and operating information are shown in English followed by the French translation.

WARNING This product is a Safety Class I instrument with a protective earth terminal.

WARNING For protection from electric shock hazard, power cord ground must not be defeated.

#### **Operating Restrictions**

The following general safety precautions must be observed during all phases of operation, service, and repair of this instrument. Failure to comply with these precautions with specific warnings in this manual violate safety standards of design, manufacture, and intended use of this instrument.

#### Grounding

To minimize shock hazard, the instrument chassis and cabinet must be connected to an electrical ground. The instrument is equipped with a three-conductor AC power cable compatible with an approved three-contact electrical outlet. The power jack and mating plug of the power cord must meet International Electrotechnical Commission (IEC) safety standards.

#### **Environment**

Do not operate the instrument in the presence of flammable gases or fumes. Operation of any electrical instrument in such an environment constitutes a definite safety hazard.

#### Service and Adjustment

Dangerous voltages exist within this instrument. Service and adjustment of this instrument is to be performed only by trained service personnel.

Do not replace components with the power cable connected. Dangerous voltages may

be present even when the power cable is disconnected.

Do not perform internal servicing or adjustment unless another person, capable of rendering first aid and resuscitation is present.

#### **Hazardous Material**

Should the LCD be damaged the liquid crystal material can leak. Avoid all contact with this material, especially swallowing. Use soap and water to thoroughly wash all skin and clothing contaminated with the liquid crystal material.

#### **Unauthorized Service**

The installation of substitute parts or the installation of any instrument modification not authorized by Agilent Technologies is specifically forbidden. The performance of such unauthorized service can negate the instrument warranty or any maintenance agreements.

Return the instrument to an Agilent Sales and Service Office for authorized service and repair.

MISE ENGARDE Cet appareil répond aux normes de la «Classe de sécurité l» et est muni d'un fil de mise à la terre pour votre protection.

MISE ENGARDE Pour prévenir les risques de choc électrique, la broche de mise à la terre du cordon d'alimentation ne doit pas être désactivée.

#### **Restrictions d'utilisation**

L'utilisateur se doit d'observer les mesures de précaution énumérées ci-dessous pour toutes les phases d'utilisation, de service et de réparation de cet appareil. Le fait de ne pas s'y conformer équivaut à ne pas respecter les mises en gardes spécifiques contenues dans ce manuel et constitue une violation des normes de sécurité relatives à la conception, la fabrication et l'utilisation prévue de cet appareil. La société Agilent n'assume aucune responsabilité envers un client qui manquerait de se conformer à ces exigences.

#### Mise à la terre

Afin de minimiser les risques de choc électrique, le chÀssis et le cabinet de l'appareil doivent être mis à la terre. L'appareil est équipé d'un cordon d'alimentation muni d'une fiche homoloquée à trois lames, compatible c.a. La prise murale et la prise femelle de la rallonge électrique doivent respecter les normes de sécurité de la «Commision électrotechnique internationale» (IEC).

#### **Environnement**

Ne faites pas fonctionner cet appareil en présence de gaz inflammables ou de vapeurs dangereuses. L'utilisation de n'importe quel appareil électrique dans ces conditions constitue un risque élevé pour votre sécurité.

#### Service et ajustement

Des «tensions dangereuses» résident dans cet appareil. Par conséquent, le service et l'ajustement doivent être effectués uniquement par une personne qualifiée.

Ne remplacez pas de composantes lorsque le cordon d'alimentation est sous tension. Il pourrait y avoir présence de «tensions dangereuses» même lorsque l'appareil est déconnecté.

Ne faites pas de service interne ou d'ajustement sauf en présence d'une autre personne, capable de prodiguer les premiers soins et de pratiquer la réanimation.

#### Matière dangereuse

Si l'affichage LCD est endommagé, la matière constituant les cristaux liquides

peut se répandre. Eviter tout contact avec cette matière, et en particulier ne pas l'avaler. Utiliser de l'eau et du savon pour nettoyer soigneusement la peau et les vêtements qui auraient été contaminés par la matière constituant les cristaux liguides.

#### Service non autorisé

L'installation de pièces étrangères, ou toute modification apportée à l'appareil sans le consentement de Agilent est formellement interdit. Le fait de procéder à de tels modifications sans autorisation pourrait entraîner l'annulation de la garantie de l'appareil ou de tout contrat de service.

Pour un service et des réparations autorisées, retournez l'appareil à un point de vente et service Agilent.

#### Additional Safety Information

#### **Electric Shock Hazard**

Do not remove the system covers. To avoid electric shock, use only the supplied power cords and connect only to properly grounded (3-pin) wall outlets.

#### **Explosion Hazard**

Do not operate in the presence of flammable gases.

#### Fire Hazard

For continued protection against fire hazard replace only with fuse of same type and rating.

#### Cleaning

To clean the product, use a damp cloth moistened with a mild solution of soap and water. *Do not* use harsh chemicals. *Do not* let water get into the product.

#### **Product Damage**

Do not use this product when the product shows visible damage, fails to perform, has been stored in unfavorable conditions, or has been subject to severe transport stresses.

Whenever this product has become damaged or wet, make the product inoperative and secure it against any unintended operation. Contact your nearest Agilent Sales office for assistance.



Instruction book symbol - the product will be marked with this symbol when it is necessary for the user to refer to the instruction book in order to protect against damage.



A product marked with this symbol indicates it is a laser product. When necessary, this symbol will be included in the instruction book for the user to refer to in order to protect against personal injury and/or correct product handling.

Ļ

Indicates potential for electrical shock.

This is an Installation Category II product.

This is a Pollution Degree 2 product.

This product is designed for indoor use only.

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# In This Manual

This manual provides information about the Advisor system hardware and software. Refer to the technology-specific Getting Started Guides for information relating to LAN, WAN, or ATM testing. Refer to the Operating System Guide for more information.

#### 1 Mainframe Overview

This chapter provides overview information about the Advisor and available Interface Modules or Undercradles.

#### 2 Getting Started

This chapter explains how to start using the Agilent Advisor. Information such as powering on the Advisor, starting measurements, and connecting peripheral devices to the Advisor are covered.

#### 3 Installing/Removing Interface Modules

This chapter explains how to install and remove several different Interface Modules and Filler Panels available for use with the Advisor.

#### 4 Attaching/Removing Undecradles

This chapter explains how to attach and remove undercradles that are used with the Advisor.

#### 5 Recovering/Re-installing Software

This chapter has information about installing Windows from your hard drive, installing or upgrading the Advisor software, and viewing electronic documentation.

#### 6 Using Modem & Ethernet PC Cards

This chapter explains how PC Card slots are used with the Advisor to increase the flexibility in the Personal

Computer section and for enhanced I/O capability with the Advisor software.

#### **A** Specifications

This appendix lists the various specifications for the Agilent Advisor.

#### **B** Breakout Box, LEDs, and Connectors

This appendix gives you specific information about the Advisor's Breakout Box, LEDs and Connectors.

#### C Regulatory Information

This appendix contains all Declarations of Conformity statements for all hardware components, Laser Safety statements, and other regulatory information.

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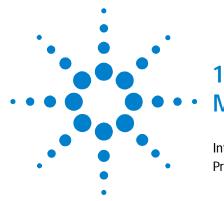
#### C Regulatory Information

**Declarations of Conformity** 76 J1990A Full Duplex Ethernet Tap 76 J2294C CEPT-E1 DB9 & RJ-45 Interface Module 77 J2294D, J2296D, J2298D E1 and T1 Interface Modules 78 J2300D Advisor WAN 79 80 J2300E Advisor WAN J2306B, J2309B LAN Ethernet and Eth/Token Ring Undercradle 81 J2307A LAN Token Ring Undercradle 82 J2524A FDDI Undercradle 83 J2527A TIMS Undercradle 84 J2900A High Speed Acquisition Undercradle 85 J2901A Gigabit Ethernet Undercradle 86 J2904B, J2293B/94B/96B/97B/98B/99B ISDN/BERT Interface Modules 87 J2905B ISDN BRI S/T and U Interface Module 88 89 J2908A DDS 4-Wire Interface Module J2909A ATM DS-3/E3 Interface Module 90 91 J2912A ATM OC-3c/STM-1 Interface Module J2912B ATM OC-3c/STM-1 Interface Module 92 J2913A ATM 155-UTP Interface Module 93 J2913B ATM 155-UTP Interface Module 94 J2914A STM-1e Interface Module 95 J3444A Fast Ethernet LAN Undercradle 96 J3445A 100Base-FX Interface Module 97 J3446D Advisor LAN 98 99 J3446E Advisor LAN J3447A LAN 100BaseFX Interface Module 100 J3759A DS-3/E3 Cells & Frames Interface Module 101 J3759B DS-3/E3 Cells & Frames Interface Module 102 J3762A HSSI Interface Module 103 J3762B HSSI Interface Module 104 J3763A, J3764A ATM 622 Undercradle and OC-12/STM-4c Interface Module 105 J3766A ATM25 Interface Module 106 J4630A VQT Undercradle 107 J4646A/47A and J4648A/49A E1 and T1 ISDN PRI Interface Modules 108

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### Introduction

The Agilent Advisor models J2300D, J2300E, J3446D, and J3446E are designed for testing your network needs in combination with available WAN, LAN, ISDN, and ATM Interface Modules or Undercradles. With the Advisor, you can look at decoded protocol information as it is traveling across a network so you can identify network problems quickly.

This manual provides information about the Advisor system hardware and software. Refer to the technology-specific Getting Started Guides for information relating to LAN, WAN, or ATM testing. Refer to the Operating System Guide for more information.

#### Model "D" Advisors

" The J2300D and J3446D Advisors have:

- AMD K6-2 chip
- 300 MHz processor
- 128 Mbytes of PC memory
- 1.44 MB flexible disk drive
- 4 GB (or larger) hard drive

#### Model "E" Advisors

The J2300E and J3446E Advisors operate at a higher speed and have more memory. These Advisors have:

- AMD K6-III w/L2 Cache-256K
- 400 MHz processor
- 256 Mbytes of PC memory
- 1.44 MB flexible disk drive
- 6 GB (or larger) hard drive

Each mainframe has a PC Card Type III slot, serial port, parallel port, external monitor port, microphone input jack, and an external audio output jack. The mainframes have available options of: a TDK 56.6 Kbps Modem PC Card and/or a Xircom Combination Modem and Network Interface CardBus Card.

There are two speakers in the mainframes for sound output. Volume control is included in the software. External speakers or a headset can be plugged into the jack labeled, "PHONES".



# **Product Matrix**

Undercradles	J2300D/J2300E WAN Mainframes	J3446D/J3446E Fast Ethernet LAN Mainframes
J2295A	х	Х
J2306A Ethernet LAN	Х	Х
J2306B Ethernet LAN	Х	X
J2307A Token Ring LAN	Х	Х
J2309A Ethernet/TR LAN	Х	X
J2309B Ethernet/TR LAN	Х	X
J2524A FDDI	Х	X
J2527A TIMS	Х	
J2900A High Speed Acquisition	Х	X
J2901A	Х	X
J3444A Fast Ethernet	Х	X
J3763A	Х	X
E4594A TELCO	Х	
E6323A E1 TELCO	х	
X =Supported Now		

	J2300D/J2300E Mainframes or J2900A Undercradle	
Interface Modules	WAN	ATM Application
J4646A/47A ISDN PRI E1	Х	
J4648A/49A ISDN PRI T1	Х	
J2293B PRI-E1	Х	X
J2294B PRI-E1	Х	X
J2294C PRI-E1	X	X
J2294D T1/E1	Х	X
J2296B PRI-E1	X	X
J2296D E1	Х	X
J2297B PRI-E1	Х	X
J2298B PRI-T1	Х	X
J2298D T1/E1	Х	X
J2299B PRI-T1	Х	X
J2904B ISDN BRI S/T	Х	
J2905B ISDN BRI S/T & U	Х	
J2908A DDS 4-Wire	Х	
J2909A ATM DS-3 <sup>1</sup>		X
J2911A ATM J2		X
J2912A ATM OC-3		X
J2912B OC-3		X
J2913A ATM-UTP <sup>1</sup>		X
J2913B ATM-UTP		x
J3759A ATM DS3/E3	Х	x
J3759B ATM DS3/E3	Х	x
J3762A WAN HSSI	Х	
J3762B WAN HSSI	Х	
J3766A ATM 25.6M		Х

Interface Module	J3446D/J3446E Fast Ethernet LAN Mainframe
J3447A 100BaseFX	X

Interface Module	J2300D/J2300E WAN Mainframes and J3446D/J3446E LAN Mainframes with J3444A Undercradle	
Media Independent Interface	Х	
J3445A Fiber Interface	х	



# Getting Started

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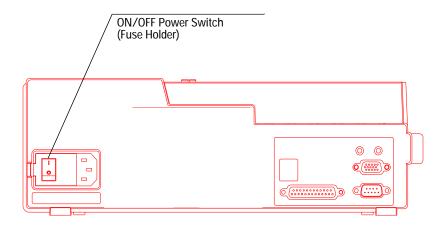
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#### 2 Getting Started

# Powering on the Advisor

Connect the AC power cable (either 115V or 230V) as shown below. The mainframe automatically determines whether the power connection is 115V or 230V. To start the mainframe, turn the power on. The ON-OFF power switch is located on the left side adjacent to the power cable connector.



If the mainframe will not power-up, check the following:

- Power cable connections are good
- AC power is available at the outlet
- Examine the fuse

## CAUTION

Each mainframe is shipped with a three-conductor power cable that grounds the Advisor when it is connected to an appropriate power outlet. Do not operate the Advisor without ground protection.

# Starting the Advisor the First Time

Windows and Advisor software are already installed on the hard drive at the factory. The software is included with your shipment for recovery/re-installation only.

When you first power up the Advisor, you will need to enter some initial Microsoft Windows setup information.

- 1 Plug in the Advisor and turn it on (the On/Off switch is located next to the power cord on the left side of the unit).
- **2** Follow the instructions on the screen to enter a first and last name, and to accept the Microsoft Windows license agreement.
- **3** Enter the Microsoft Windows authenticity product ID# affixed to the mainframe.
- 4 When the Date/Time Properties dialog is displayed, set the date and time, select the time zone, and press Enter.

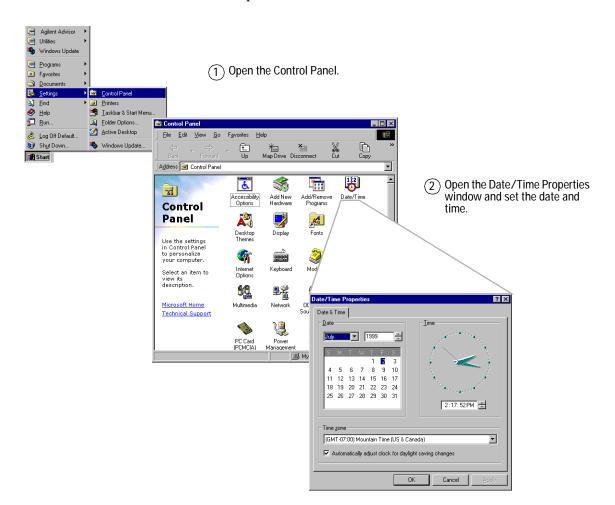
The time and date features are used for many of the applications and reports generated by the Advisor. It is important to set your local time and date when you receive your Advisor. Setting the time and date also updates system configuration files. The time and date are maintained even when the Advisor is off.

**5** After the Windows setup is complete, shut down and power off the unit to update setup files and to prepare the Advisor for running measurements.

#### 2 Getting Started

# Setting the Date and Time

The time and date features are used for many of the applications and reports generated by the Advisor. It is important to set your local time and date when you receive your Advisor. Setting the time and date also updates system configuration files. The time and date are maintained even when power to the Advisor is off



# **Starting an Advisor Application**

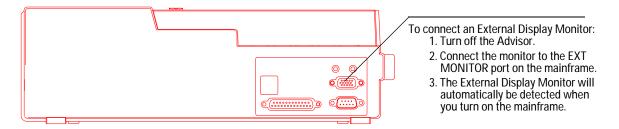
All of your applications can be started from Windows desktop. Depending on the type of mainframe you have and any undercradles or modules you have installed, the available applications will be displayed on the Start menu. Refer to the technology-specific (ATM, WAN, LAN) Getting Started Guides for specific startup instructions.



#### 2 Getting Started

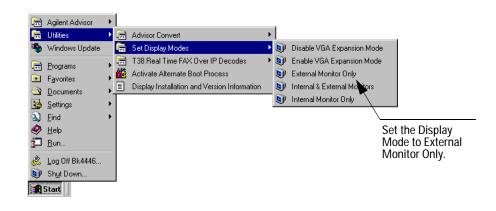
# **Connecting an External Display Monitor**

You can connect an external display monitor to the Advisor.



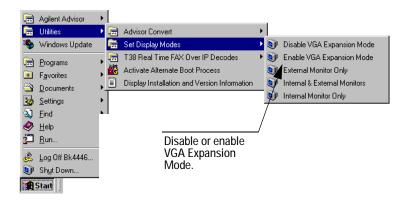
With an Active SVGA display, the external monitor display is SVGA resolution 800x600.

If you want to adjust the display to a higher resolution you must explicitly change the display mode to External Monitor Only.



# Setting VGA Display Mode

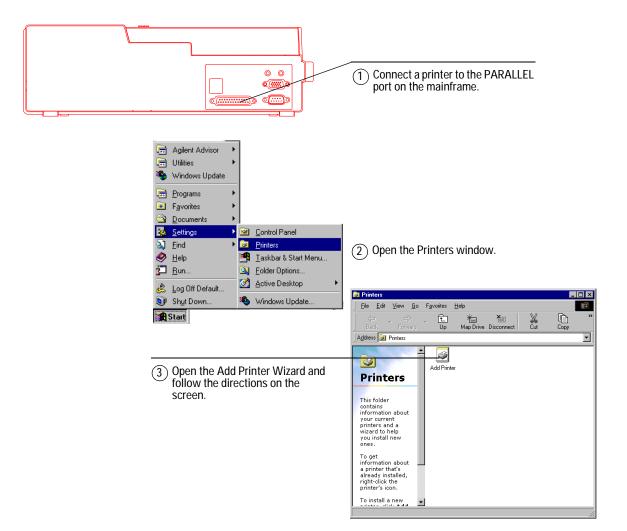
You can either disable or enable VGA Expansion Mode under Utilities on the Start menu.



#### 2 Getting Started

# **Connecting a Printer**

You can connect a printer to the Advisor so you can print files, help topics, and measurements results. The default printer selection is No Printer. If you want to use a printer with your Advisor, you must select the printer driver and output port.





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#### 3 Installing/Removing Interface Modules

# Installing Interface Modules

There are several Interface Modules and one Filler Panel available for use with the Advisor. The Filler Panel acts as a cover for the Interface Module slot when no Interface Module is installed.

You can install interface modules directly into the mainframe or into a compatible undercradle. Refer to Chapter 1 for supported Interface Module configurations with the Advisor and Undercradles.

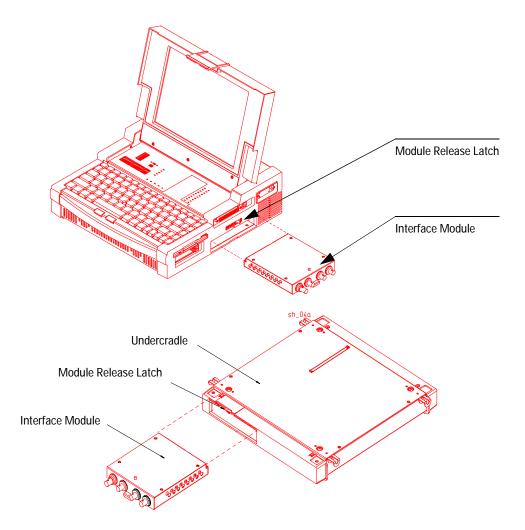
#### CAUTION

Make sure you turn off the power and unplug the Advisor before attaching or removing undercradles.

- 1 Make sure the Module Release Latch is in the Install/Remove Position.
- 2 Slide the Interface Module or Filler Panel into the opening.
- **3** Push it firmly into place until it is seated and the Module Release Latch moves to the Locked Position. The Module Release Latch does not move when you install a Filler Panel. You will need to push the Module Release Latch to move the latch into its locked position.

# **Removing Interface Modules**

- 1 Press the left end of the Module Release Latch (labeled "PUSH TO UNLOCK"), then slide the latch toward the left (Install/Remove Position).
- 2 Pull the Interface Module or Filler Panel out of the Advisor.



3 Installing/Removing Interface Modules



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# Attaching/Removing Undercradles

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#### 4 Attaching/Removing Undercradles

# **Tools Required**

Depending on which undercradle you have ordered, the following equipment/tools are included to attach and remove the undercradle:

- 4 rubber feet
- 4 Torx screws (for the undercradle)
- 2 Torx screws (not needed for J2300D/E and J3446D/E)
- 1 Right side endcap expander
- 1 Torx wrench
- 1 Small flat endcap
- 1 connector board
- 2 Grounding Strips (not needed for J2300D/E and J3446D/E)

#### NOTE

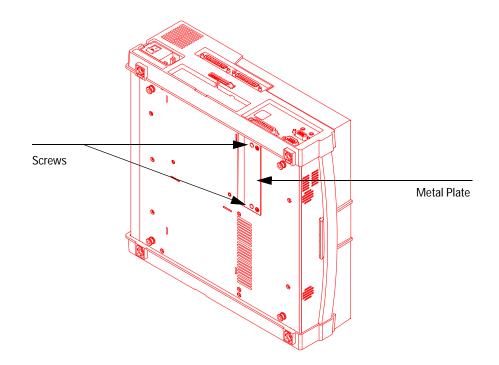
Any E4594A Telco Undercradle without the new E4594A Serial number label that includes the phrase "INT 15," must be modified at your nearest Service Center in order to operate correctly with the J2300D/E and J3446D/E Advisors.

## Attaching an Undercradle

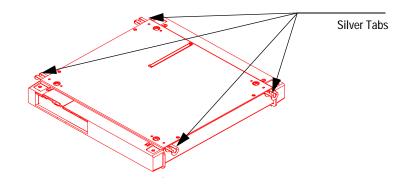
### CAUTION

Turn off the power and unplug the Advisor before attaching or removing undercradles.

- 1 If the metal plate (on the bottom of the Advisor) is covering the opening for the Undercradle to attach to, remove the two screws from the metal plate. Use the wrench provided in the miscellaneous parts kit (or a T10 Torx screwdriver) to remove the screws.
- 2 Slide the metal plate over to the next set of drilled holes in the metal plate and re-attach it (with the same screws you removed in the previous step). This will leave an opening into which you can install your connector board. Ensure that the screws are flush with the metal plate.



- 4 Attaching/Removing Undercradles
  - **3** Insert the connector board into the slot uncovered by the metal plate.
  - 4 Make sure all four silver tabs on the top of the undercradle are pulled out.
  - **5** Place the mainframe on top of the undercradle, matching the connector on the bottom of the mainframe to the connector on the top of the undercradle.
  - **6** Push in the four silver tabs, locking the undercradle to the mainframe.



# **Removing an Undercradle**

- 1 Turn off the power and unplug the Advisor.
- **2** Pull out the four silver tabs on the front and the back of the undercradle.
- **3** Lift the Advisor away from the undercradle.

## Using the Empty J2295A Undercradle

The empty Undercradle (J2295A) can be used with the Advisor so you can add one or two of your own ISA compatible printed circuit cards to customize your Advisor.

#### Disassembling the J2295A Undercradle

CAUTION

Turn off the power and unplug the Advisor before attaching or removing undercradles.

- 1 If already attached, remove the undercradle from the Advisor. Refer to "Removing an Undercradle" on page 34.
- **2** Turn the undercradle upside down, with the four black feet facing up.
- **3** Carefully remove the four black rubber feet using a small flat screwdriver to pull them out of their seating.
- **4** Remove the four screws using a #10 Torx driver.
- **5** Turn the undercradle over.
- **6** Remove the eight screws (four flat-head and four pan-head) from the top of the undercradle.
- 7 Slide the two plastic endcaps off both sides, and lift off the top of the undercradle.

#### 4 Attaching/Removing Undercradles

### **Installing Printed Circuit Cards**

You can install up to two printed circuit cards in the undercradle – full-length or smaller. For full-length cards, you will need to use the endcap expander. For smaller cards or only one card, you can use the flat endcap.

#### CAUTION

Be sure to follow Electro-Static Discharge (ESD) procedures when handling any cards.

- 1 Gently lift each corner of the connector board to disconnect it from the standoffs.
- **2** Turn the connector board over and fasten the card(s) in the slots provided.
- **3** Press the connector board onto the standoffs. The cards should be underneath the connector board as you secure it.
- **4** Included with your undercradle are seven foam blocks. You can use them to help stabilize your PC Cards inside the undercradle.
- **5** Remove the protector sheet and place the foam block where needed. It should adhere to the sheet metal and prevent movement of the cards.

# Re-assembling the J2295A Undercradle

- 1 Place the top back on the undercradle, aligning the slot in the top with the Advisor connector. Fasten with the four flat-head screws.
- 2 On the side nearest to the Advisor connector, slide the left side piece into place and secure it with four pan-head screws (two on the top and two on the bottom). If you are only installing one printed circuit card, insert the small flat endcap in the left side piece before you put it on the undercradle.
- **3** If you are installing full-length printed circuit cards, insert the endcap expander into the right side before you place it on the undercradle. If you are installing smaller printed circuit cards, insert the flat metal endcap in the right side before you place it on the undercradle.
- 4 Slide the undercradle right side piece into place and secure it with four pan-head screws (two on the top and two on the bottom).
- **5** Turn the undercradle over and replace the four black rubber feet into the foot indentations.

4 Attaching/Removing Undercradles



5

# **Recovering/Re-installing Software**

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Agilent Technologies

### 5 Recovering/Re-installing Software

# Installing Windows 98 From the Hard Drive Image

The Windows 98 operating system image is included on a separate partition on the hard drive for recovery. It is recommended you back up this image to a network server or a CD so you can easily recover the operating system in the event of a hard drive failure.

Note, the image on this hard drive is not compatible with the following D series mainframes:

J2300D serial numbers below US41030101

J3446D serial numbers below US41040101

If you have older D series mainframes, you need to keep the backup images you made for those mainframes. Use this manual for instructions to install the operating system from the hard drive image.

When you install Windows 98 Second Edition, you will be reformatting the C: drive. You will lose all installed applications, customized tests, and any data files that you have created.

### NOTE

Make sure that you back up ALL files you want to save before you continue. This process does not install the Advisor software.

System	• A D-model Advisor with a 2 GB or larger hard disk
Requirements to install Windows 98 SE	• Backup media archived on a separate partition, as configured from the factory. Each Advisor shipped from the factory has two partitions in the hard drive. The second partition contains the Windows recovery image.
FAT32 support	The external hard drives, used for Option 506, do not support FAT32. If you use FAT32 on an Option 506 unit, you will encounter severe hard drive problems.

Option 506	Option 506 supports three different external hard drives. Check the ARCHIVES folder on the Advisor software CD if you need to recreate disks that can be used with your Option 506 external hard drive.	
NOTE	When creating an Option 506 disk set, make sure all the disks you create are copied from the set of images in a single folder. These disks cannot be mismatched, or problems will be seen.	
Items Required to Upgrade	<ul> <li>Advisor Installation Preparation Disk for HD Recovery</li> <li>Sufficient blank 3.5" 1.44 MB diskettes to back up existing applications, tests, or other data (prior to re-installing Windows 98)</li> </ul>	
	• BIOS Upgrade Disk, if your BIOS is not current	
	Read through this entire section before you begin installing Windows 98.	
	1 Remove all peripheral hardware (including undercradles) – you can leave a serial mouse attached.	
	<b>2</b> If you have Advisor software loaded and are in the Alternate Boot Mode, you should return to Windows and properly shut down before continuing.	
	<b>3</b> Insert the Advisor Installation Preparation Disk for HD Recovery into the floppy drive.	
	<b>4</b> Turn on the Advisor and wait while the installation process sets up and surveys your system. This takes several minutes.	
	5 Follow the instructions on the screen until Windows setup is complete (the registration process is completed and the Windows desktop is displayed).	
	<b>a</b> If necessary, you will be prompted to upgrade the BIOS using the BIOS Upgrade Disk. Follow the on-screen prompts, answering "Y" when prompted to flash the BIOS.	
	<ul> <li>b Once the BIOS upgrade is complete, but before rebooting the system, remove the BIOS Update Disk from the floppy drive and re-insert the Installation Preparation Disk. When ready, press any key to reboot the system, as prompted by the BIOS Upgrade utility.</li> </ul>	

### 5 Recovering/Re-installing Software

#### NOTE

As the system is rebooting, press and hold the Del key until the BIOS setup screen is displayed. In the "Default" box, double-click Optimal settings, click "Yes" when prompted to confirm this selection. Press the Esc key to display the Exit menu. Click "Save Changes and Exit" to save the configuration and restart the Advisor.

**6** From the Start menu, select Shut Down. In the Shut Down Windows dialog, select Shut down and then click OK.

# Installing/Upgrading Advisor Software

Refer to the installation instructions on the inside of the Advisor CD envelope.

Once you have installed Advisor software, refer to the technology specific Getting Started guides (ATM, WAN, LAN) for information to help you start the application.

# **Viewing Electronic Documentation**

In addition to the paper documentation shipped with your order, all the Advisor documentation is also included in PDF format on the:

- Software CD so you can select the documentation (in addition to software applications) to install on your hard drive, and view or print later.
- Electronic Documentation CD so you can view the documentation from the CD on any PC.

Refer to the electronic documentation viewing instructions on the inside of the Advisor CD envelope.



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6



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# Introduction

The Personal Computer Memory Card International Association (PCMCIA) has created a standard for credit card size devices with memory, mass storage, and I/O functionality. The standard makes compatibility possible by defining mechanical, electrical, and software requirements.

The purpose of the PC Card slots are to increase the flexibility in the Personal Computer section of the instrument. The primary use of this flexibility is for enhanced I/O capability with the Advisor software. This includes functions such as a modem, a LAN interface, and a CD-ROM Drive.

While integrated I/O is the primary focus for the PC Card slot, it can also serve other purposes. Other PC Card solutions include removable mass storage, speech, paging, encryption, global positioning, and even additional protocol testing.

**Compatibility** The Advisor conforms to PC Card specification 2.10. Each slot is capable of receiving one Type I or Type II card. A single Type III or larger card may be inserted into the bottom slot only. The following types of cards are compatible with the Advisor:

- ATA Drive
- Audio
- Ethernet/Modem Combo
- Fax/Modem
- Network Interface
- SCSI Host Adapter
- CD ROM

# Installing and Removing PC Cards

Before you install a PC Card, make sure the PC Card slot is active by selecting: | Start | Settings | Control Panel | and then double-click on the PC Card (PCMCIA) Wizard. If the slots are active you will see the PC Card (PCMCIA) Properties window. If the slot is not active, you will see the PCMCIA Welcome Window. To activate the PC Card slot: at the Welcome Window, press Enter to continue, press Enter to accept default PC Card drivers, then press Enter to close the PC Card Wizard.

If you are using a supported Modem or NIC PC Card, the drivers for these devices are already installed on your Advisor. If you are using an "unsupported" device, follow the manufacturers instructions to install the necessary drivers.

Do not load the card vendor's socket or card services software into the Advisor LAN or ToolKit WAN (DOS applications)

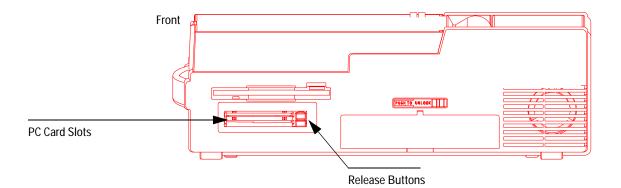
### NOTE

The configuration will be different in some ways between the WAN and LAN software. Refer to the Advisor WAN — High Speed Toolkit User's Guide (under Configuring a Slave) for configuring the software for WAN PC Card operation. This guide is distributed as a PDF file on the Advisor CDs.

### To Install a PC Card

- 1 Slide the PC Card in the PC Card slot until you feel some resistance. All PC Cards are keyed for correct installation. The card's label will typically face up or will explain which side is up.
- **2** Push firmly, but gently, to ensure a good connection. Never attempt to force the card into position.
- **3** Listen for an audible double-beep tone within five seconds, confirming that the system recognizes a PC Card has been inserted.

# When using the alternate boot selection (in MS-DOS mode) or when you have a Gigabit Ethernet undercradle attached, install your PC Card before you turn on the Advisor.



4 To verify that the system has properly identified the card, check the system properties of the installed PC Card. On the desktop, right click on My Computer and select Properties. From the System Properties window, select the Device Manager tab, select your PC Card device category, and double-click on the PC Card description. From there you can check either General or Resources information.

### NOTE

### To Remove a PC Card

- 1 From the Windows desktop, select the PCMCIA icon (located in the Notification area near the clock).
- **2** Highlight and click the Stop PCMCIA card description. A message box will be displayed indicating that you can now safely remove the PCMCIA Card.
- **3** Push the release button on the side of the PC Card slot and pull out the card.

You can also exit any applications, properly shut down Windows, and then remove the PC Card.

#### NOTE

When using the alternate boot selection (MS-DOS mode) or when you have a Gigabit Ethernet Undercradle attached, turn off the Advisor before removing the PC Card.

### Software Configuration

Windows — with a PC Card

- If a PC Card uses an interrupt, Windows will generally assign interrupt 15 to the card if it is available. If this interrupt is not available, Windows will assign the next available interrupt.
  - If a PC Card uses I/O Addresses, Windows will dynamically allocate the next free range to the card. If the PC Card is a modem card, Windows must select an I/O Addresses range of COM 1, COM 2, COM 3, or COM 4. Generally, Windows will use COM 2. A Network PC Card will normally default to 130-13F.
  - PC Card Modems are generally located at I/O address 02F8-02FF(COM2), with interrupt=11.
  - ATA disks use available I/O space and reserve no interrupt.

MS-DOS — with	The only PC Cards supported in the Toolkit are the U.S.
a PC Card	Robotics Megahertz PC Card Modem, and the TDK Systems PC
	Card Modem.

The default modem for mainframes is the TDK Modem. If you want to change the default modem for Toolkit, select | Start | Utilities | Select Modem for Toolkit Remote |.

A point enabler is used to activate each modem for use with the Toolkit Remote package. Both modems are set for I/O space COM4, Interrupt 11, and memory region CC000-CCFFF.

PC Functions	Interrupt	Analyzer Functions	Interrupt
Keyboard Controller	1	Ethernet or Ethernet/Token Ring Undercradle	10
Programmable Interrupt Controller	2	FDDI Advisor Undercradle	3, 5, 9, 10, 11, 12, or 15
COM 1	4	High Speed Acquisition Undercradle	none
Sound Hardware	5	TIMS Undercradle	15
Flexible Disk Controller	6	T1 Telco Undercradle	15
LPT1/Parallel	7	E1 Telco Undercradles	15
Real Time Clock	8	Gigabit Undercradle	11
Button Mouse	12	J3446D/E	9, 10, or 12
Numeric Data Processor	13	J3444A Undercradle	3, 5, 9, 10, 11, or 15
Hard Disk Controller	14		
Available to PC Card in Advisor WAN	9,10,11		
Available as Undercradle in Advisor WAN	9,10,11,15		

I/O Address	System/Analyzer Function	I/O Address	System/Analyzer Function
000-00F	DMA Controller Register	300-301	Sound H/W
020-021	PIC #1	320-32F	WAN Low Speed Hardware
040-043	Prog. Interval Timer Reg	330-331	T1 Telco Undercradle
060-	Keyboard Controller	330-33F	TIMS Undercradle
061-	System Speakers	376-377	IDE
064-	Keyboard Controller	378-37F	LPT1/Parallel
070-	RTC Index & NMI Mask	388-38B	Sound H/W
071	RTC Data Port	3B0-3BB	Video Registers
080-09F	DMA Page Register	3C0-3DF	Video Registers
0A0-0A1	PIC #2	3E0-3E1	PC Card Controller
0C0-0DF	DMA Controller Register	3E8-3EF	COM3
OFO-OFF	Numeric Data Processor	3F0-3F7	Flexible Disk Controller, Primary
110-12F	ATM Analyzer in Undercradle	3F8-3FF	COM1
150-16F	WAN/ATM Analyzer Hardware	B2-B3	Power Management
170-177	IDE	CF8-CFF	Chipset Configuration
1F0-1F	IDE	C2F0	LAN Hardware
200	Sound H/W	D2F0	LAN Hardware
220-22F	Sound H/W	E2F0	LAN Hardware
2E8-2EF	COM4		
2F0-2F1	LAN Analyzer Hardware		
2F8-2FF	COM2		

# PC Card Modems

If you are using a supported modem, the modem software is already installed. You will need to set your Dialing Preferences for your modem to operate properly.

If you are using an unsupported modem, Windows will prompt you to insert the manufacturer's diskette if necessary.

- 1 Set these preferences by selecting: | Start | Settings | Control Panel | Modems |.
- **2** Under General Modems Properties, select Dialing Properties. This opens another folder called, My Locations. The default area code from the factory is set at area code 719 and country USA. Change these and any other settings to meet your requirements.

#### NOTE

The modem requires an analog phone line and is not compatible with typical digital PBX systems.

The modem can be connected to a standard telephone line through an RJ-11 phone jack.

Transmission rates for the modem are up to 56.6 kbps (14.4 kbps for fax). The modem and fax operate with standard AT commands.

The modem is compatible with many commercially available software applications. Check the vendor's specifications to see if a particular application is compatible with the modem's capabilities.

#### NOTE

Be sure to choose a country using the country selection with your international modem, the same selection will apply for any MS-DOS mode program that uses a modem.



# A Specifications

Physical Specifications52Operating Conditions53J2300D/E Specifications54J3446D/E Specifications56The Keyboard and Button Mouse58



Agilent Technologies

# A Specifications

# **Physical Specifications**

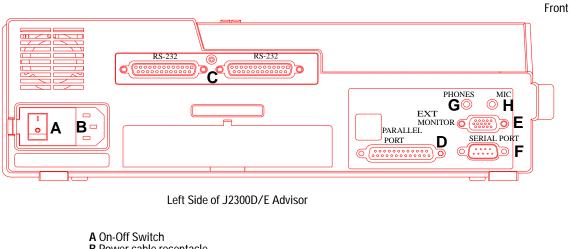
Weight	J2300D Mainframe	6.45 kg (14.2 lbs)	
	J2300E Mainframe	6.45 kg (14.2 lbs)	
	J3446D Mainframe	6.81 kg (15 lbs)	
	J3446E Mainframe	6.81 kg (15 lbs)	
	J2900A Undercradle	2.1 kg (5 lbs)	
	J2901A Undercradle	2.1 kg (5 lbs)	
	J2295A Undercradle	1.04 kg (2.3 lbs)	
	J2306B Undercradle	1.40 kg (3.1 lbs)	
	J2307A Undercradle	1.40 kg (3.1 lbs)	
	J2309B Undercradle	1.40 kg (3.1 lbs)	
	J2524A Undercradle	2.0 kg (4.4 lbs)	
	J2527A Undercradle	1.49 kg (3.3 lbs)	
	J2900A Undercradle	2.0 kg (4.4 lbs)	
	J3444A Undercradle	2.08 kg (4.6 lbs)	
	E4594A Undercradle	1.97 kg (4.35 lbs)	
Dimensions	J2300D, J2300E, J3446D, J3446E Mainframe	11.44H x 31.43W x 31.75D cm (1.75H x 12.375W x 12.5D inches)	
	Undercradles	3.7 cm (1.5 inches) height for	
	(exceptions noted)	undercradle	
	J2901A Undercradle	1.75H x 31.11W x 29.84 cm (4.0H x 12.375W x 12.5D inches)	
	J2900A High Speed Undercradle	4.76 cm (1.875 inches) height for	
	J3444A Undercradle	undercradle	
	J2527A TIMS Undercradle		
	E4594A TELCO Undercradle	5.72 cm (2.25 inches) height for undercradle	
Display	The standard display for the J2300D, J2300E, J3446D, and J3446E Mainframes is a 26.5 cm diagonal (10.4 inch) active matrix TFT color SVGA		
	display.		

# **Operating Conditions**

Temperature	Operating Non-operating	+5°C to +40°C (+41°F to +104°F) -25°C to +60°C (-13°F to +140°F)
Humidity	Operating Storage	20% to 80% relative humidity, non-condensing to 40 <sup>o</sup> C 10% to 90% relative humidity to 60 <sup>o</sup> C
Altitude	Operating Storage	4,575 meters (15,000 feet) 15,250 meters (50,000 feet)
Power Requirements	External	100 to 120 VAC, 50-60 Hz, 1.5A 200 to 240 VAC, 50-60 Hz, 1.0A

### **A** Specifications

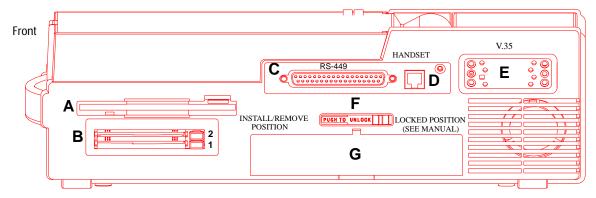
# J2300D/E Specifications



B Power cable receptacle C Two RS-232/V.24 connectors D Parallel Port E External Monitor F Serial Port G Headphones H Microphone

Refer to Appendix B for connector pinouts.

### Specifications A



Right Side of J2300D/E Advisor

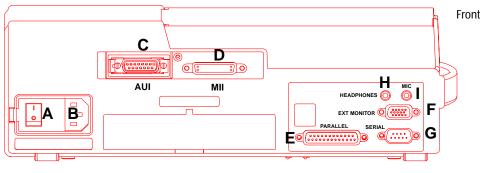
A 3-1/2 inch high density flexible disk drive B Dual PC Card slots C RS-449 connector D Handset connector E V.35 connector F Module Release Latch for Interface Modules G Interface Module slot

Refer to Appendix B for connector pinouts.

Refer to Chapter 1 for the matrix of interface modules and undercradles that you can use with the J2300D/E.

### **A** Specifications

# J3446D/E Specifications

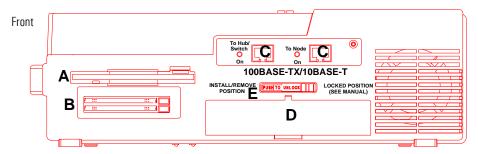


Left Side of J3446D/E Advisor

A On-Off Switch B Power Cord receptacle C Ethernet (AUI) D Fast Ethernet (MII) E Parallel Port F External Monitor G Serial Port H Headphones I Microphone

Refer to Appendix B for connector pinouts.

### Specifications A



Right Side of J3446D/E Advisor

A 3 1/2 inch high density flexible disk drive B PC Card Slot C 100Base-TX/10Base-T Ethernet connectors D Interface Module slot E Module Release Latch for Interface Modules

Refer to Chapter 1 for the matrix of interface modules and undercradles that you can use with the J3446D/E.

Refer to Appendix B for connector pinouts.

#### A Specifications

# The Keyboard and Button Mouse

The keyboard includes 88 keys with the integrated Button Mouse. The left and right mouse keys are located below the space bar on the chassis of the Advisor. The Button Mouse responds quickly to pressure and the cursor will move in the direction and with the desired speed equal to pressure applied to the Button Mouse.

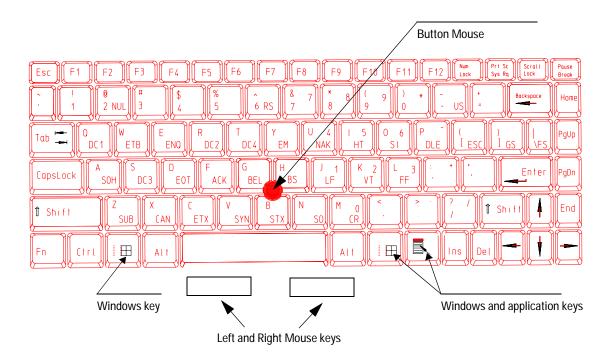
The keyboard has three extra keys – two Windows keys and one application key. The two Windows keys will automatically display the Start Menu, and the application key responds the same as pressing the right mouse key on any selected area of focus. There are 12 function keys.

### NOTE

If you need to replace the keyboard button cover of your keyboard, please call you local sales representative. The replacement part number is 4320-0445.

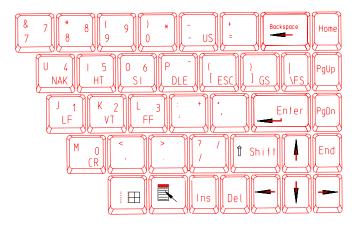
To use the control characters, hold down the CTRL key and press the control character you want. The control characters and their corresponding keys are shown in the following figure.

# Specifications A



#### **A** Specifications

By pressing the Num Lock key, you can use the numeric keypad. The following figure shows the numeric keypad locations and numeric equivalents.



### **Keyboard Operation LEDs**

Located above the keyboard are the following LEDs that show keyboard functions when they are active.

- Power On
- Caps Lock
- Num Lock
- Scroll Lock
- Hard Disk



В

# Breakout Box, LEDs, and Connectors

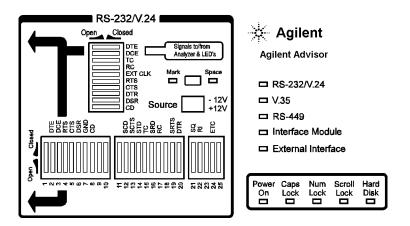
RS-232/V.24 Breakout Box and System LEDs 62 Lead Status LEDs 65 V-Series Interfaces 66 AUI — 100Base-T 72 MII — 100Base-T 73 MDI — 100Base-TX 74



#### **B** Breakout Box, LEDs, and Connectors

# RS-232/V.24 Breakout Box and System LEDs

The Advisor gives you breakout box and jumpering capabilities for RS-232/V.24 circuits. The figure below shows the breakout box and its associated connections. Note that the large black arrows point to the RS-232/V.24 test connectors on the side of the Advisor. The rearward connector is the preferred test input for most tests. The forward connector should only be used when signals need to be isolated by the rocker switches or cross-connected by way of the switch jacks and jumper leads.



All 25 leads are accessible for jumpering on either side of the breakout switches (the lateral switch bank numbered 1 through 25.) If you want to monitor or simulate on auxiliary data channels or to observe control signals other than RTS, CTS, DTR, DSR and CD, you can perform the appropriate transpositions by opening the corresponding switches and jumpering between the appropriate leads. To do so, connect the circuit under test to the Advisor through the forward RS-232 test connector and perform the necessary transpositions over the lateral switch bank.

The vertical switch bank provides hardware isolation of incoming or outgoing data and control signals for special purpose testing. An example would be using the Advisor to supply terminal generated control signals without conflicting with existing data signals. In this case, you would want to open the DTE switch to isolate the circuit being tested from the internal data transmitter.

Pin 1 of the RS-232 test port is Frame Ground or Protective Ground. It is connected to the case of the Advisor and, through the third wire of the power cable, to Ground. If you have a data circuit that requires isolation of Frame Ground, use the forward RS-232 test port and open switch 1 on the lateral switch bank

Pin 7 of the rearward RS-232 test port is Signal Ground, and it is isolated from Frame Ground by 100 KOhms to minimize ground-loop problems.

In monitor mode, the inputs to all V-Series signal receivers represent only 1/5 of a standard load, minimizing circuit loading effects. In Simulating and BERT testing modes, the transmitters are configured with normal source impedance.

### Mark/Space Indicator

NOTE

You can use the Mark/Space Indicator to test the state of any circuit on an RS-232/V.24 interface. The Mark/Space Indicator has two test jacks, which are connected together electrically. To do this, simply jumper from any test jack on either of the lateral or vertical switch banks to either of the Mark/Space Indicator jacks and observe the results. If the incoming signal is more positive than +3.0 volts, the Space LED lights. If the incoming signal is more negative than -3.0 volts, the Mark LED lights. If the Mark and the Space LEDs both light up, the incoming signal is actively changing states. This is normal for data and clock signals, but indicates a problem for control signals.

### NOTE

EIA-232D (Formerly RS-232C) specifications consider interface signals in the range of -3.0 to +3.0 volts to be indeterminate (or not valid). Consistent with this recommendation, the Mark/Space Indicator treats signals in this range as "not present" and gives no indication.

### **B** Breakout Box, LEDs, and Connectors

# **Source Voltage**

You can hard-wire any signal or control line as On or Off by jumpering it to the Source jacks. The rearward three jacks are connected together electrically and supply -12 volts through a 1 KOhm resistor. The forward three jacks are connected together electrically and supply +12 volts through a 1 KOhm resistor. If you connect a signal or control line to the -12 volts supply it creates a Mark or Off state and if you connect it to the +12 volts supply it creates a Space or On state.

### **Active Interface LEDs**

The following is a list of the five LEDs that indicate which interface is currently configured:

- RS-232/V.24
- V.35
- RS-449
- Interface Module
- External Interface

### CAUTION

Do not connect more than one Advisor port at a time. The V.35, RS-449, RS-232, and External ports are not independent of one another. Connecting more than one port at a time can cause unreliable results.

### Lead Status LEDs

On the right side, rearward of the keyboard, are ten pairs of LEDs that show a real-time indication of lead status for all of the interfaces. These LEDs also indicate data, clock and control information for the V-Series interfaces. The following list provides information on the meaning of the lighted LEDs:

Left column	Red	Mark State for Data, Off State for Control Signals
Right column	Green	Space State for Data, On State for Control Signals
Both LEDs	lighted	Active signal toggling
Neither LED	lighted	No signal present

When the selected interface is RS-232/V.24, the left column LEDs light when the signal level is more negative than -3.6 volts and the right column LEDs light when the signal level is more positive than +3.6 volts. This is a safety margin of 20% above EIA-232D minimum signal requirements of -3.0 and -3.6 volts. If the circuit under test is lighting the proper Advisor LEDs, then there is enough signal present to allow any EIA-232D/RS-232 conforming device to receive the data and control signals. If the circuit under test cannot light these LEDs, the signal levels are too low for reliable reception.

For the Interface Modules, the left column shows the state of the Equipment (or user) signal and the right column shows the state of the Line (or central office) signal. Alarm and Error indications cause their respective red LEDs to light. The green Signal LEDs light if a signal is present. If there is no signal present, the topmost red LED lights to indicate a loss of signal.

These LEDs can provide a visual indication as to whether a V-Series device is physically DTE or DCE. First connect the Advisor to the device under test and configure it for the Monitor mode. If either the DTE/SD Mark or Space LED lights, the device under test is DTE. If the DCE/RD Mark or Space LED lights, the device under test is DCE. If the Advisor is to Simulate a device under test, it must complement the device's physical characteristic. If the device is DTE, the Advisor must be DCE and vice versa.

### **B** Breakout Box, LEDs, and Connectors

# **V-Series Interfaces**

The V-Series Interfaces are the RS-232, RS-449, and V.35 interfaces. The following signals are analyzed on the V-Series Interfaces:

V-Series Functions

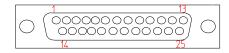
Function	RS-232	V.35	RS-449
Send Data	DTE	SD	SD
Receive Data	DCE	RD	RD
DTE/Send Timing (DCE)	TC	SCT	ST
DCE/Receive Timing (DCE)	RC	SCR	RT
DTE/Send Timing (DTE)	ETC	SCE	Π
Request to Send	RTS	RS	RS
Clear to Send	CTS	CS	CS
Data Terminal Ready	DTR	DTR	TR
Data Set/Mode Ready	DSR	DSR	DM
Carrier Detect/Rec. Ready	CD	CD	RR

V-Series Functions for High Speed External Pods Only

Function	RS-232	V.35	RS-449
Local Loopback (Drv)		LLB	LLB
Remote Loopback (Drv)		RLB	RLB
Test Mode (Mon)		TM	ТМ

# Breakout Box, LEDs, and Connectors B

# RS-232C/V.24



Pin	CCITT Circuit	Circuit Function	Pin	CCITT Circuit	Circuit Function
1	101	Protective Ground	14	118	Secondary Transmitted Data
2	103	Transmitted Data	15	114	Transmission Signal Element Timing (DCE Source)
3	104	Received Data	16	119	Secondary Received Data
4	105	Request to Send	17	115	Receiver Signal Element Timing (DCE Source)
5	106	Clear to Send	18		Unassigned
6	107	Data Set Ready	19	120	Secondary Request to Send
7	102	Signal Ground (common return)	20	108.2	Data Terminal Ready
8	109	Received Line Signal Detector	21	110	Signal Quality Detector
9		(Reserved for Data Set Testing)	22	125	Ring Indicator
10		(Reserved for Data Set Testing)	23	111/112	Data Signal Rate Selector (DTE Source)
11		Unassigned	24	113	Transmit Signal Element Timing (DTE Source)
12	122	Secondary Received Line Signal Detector	25		Unassigned
13	121	Secondary Clear to Send			

### **B** Breakout Box, LEDs, and Connectors

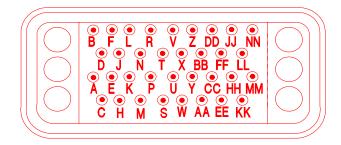
# RS-449



Pin	Circuit Name	Pin	Circuit Name
1	Shield	20	Receive Common
2	Send Timing	21	Spare
3	Spare	22	Send Data
4	Send Data	23	Send Timing
5	Send Timing	24	Receive Data
6	Receive Data	25	Request to Send
7	Request to Send	26	Receive Timing
8	Receive Timing	27	Clear to Send
9	Clear to Send	28	Terminal in Service
10	Local Loopback	29	Data Mode
11	Data Mode	30	Terminal Ready
12	Terminal Ready	31	Receiver Ready
13	Receiver Ready	32	Select Standby
14	Remote Loopback	33	Signal Quality
15	Incoming Call	34	New Signal
16	Select Frequency/Signal Rate Selector	35	Terminal Timing
17	Terminal Timing	36	Standby Indicator
18	Test Mode	37	Send Common
19	Signal Ground	1	

# Breakout Box, LEDs, and Connectors B

# V.35



Pin	Circuit Name	
А	Chassis Ground	
В	Signal Ground	
С	Request to Send	
D	Clear to Send	
E	Data Set Ready	
F	Receive Line Signal Detect	
Р	Transmit Data (A)	
R	Received Data (A)	
S	Transmit Data (B)	
Т	Received Data (B)	
U	Terminal Timing (A)	
V	Receive Timing (A)	
W	Terminal Timing (B)	
Х	Receive Timing (A)	
Y	Transmit Timing (A)	
AA	Transmit Timing (B)	

# **B** Breakout Box, LEDs, and Connectors

# Interface Pin-Out Comparison

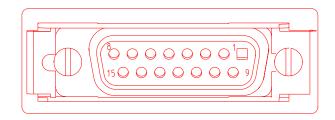
25 Pin34 Pin37 Pin1-Protective GroundA-Protective Ground1-Shield 37-Send Common2-Transmitted DataP-Transmit Data (A) S-Transmit Data (B)4-Send Data (A) 22-Send Data (B)3-Received DataR-Received Data (A) T-Received Data (B)6-Received Data (A) 24-Received Data (B)4-Request to SendC-Request to Send7-Request to Send (A) 25-Request to Send (B)5-Clear to SendD-Clear to Send9-Clear to Send (B)5-Clear to SendD-Clear to Send9-Clear to Send (B)6-Data Set ReadyE-Data Set Ready11-Data Mode (A) 29-Data Mode (B)7-Signal GroundB-Signal Ground19-Signal Ground8-Carrier DetectF-Receive Line Signal Detect13-Receiver Ready (B)9-Reserved for Testingm-Reserved for DSU Testing20-Receive Common10-Reserved for Testing10-Local Loop (A) 14-Remote Loop (B)11-Unassigned3-Spare 21-Spare3-Spare 21-Spare12-Sec. Carrier DetectY-TX Signal Element Timing5-Send Timing (A) DCE Source 23-Send Timing (B) DCE Source	RS-232C/CCITT V.24	CCITT V.35	RS-449
2-Transmitted DataP-Transmit Data (A) S-Transmit Data (B)37-Send Common2-Transmitted DataP-Transmit Data (A) S-Transmit Data (B)4-Send Data (A) 22-Send Data (B)3-Received DataR-Received Data (A) T-Received Data (B)6-Received Data (A) 24-Received Data (B)4-Request to SendC-Request to Send7-Request to Send (A) 25-Request to Send (B)5-Clear to SendD-Clear to Send9-Clear to Send (A) 27-Clear to Send (B)6-Data Set ReadyE-Data Set Ready11-Data Mode (A) 29-Data Mode (B)7-Signal GroundB-Signal Ground19-Signal Ground8-Carrier DetectF-Receive Line Signal Detect13-Receiver Ready (B)9-Reserved for Testingm-Reserved for DSU Testing10-Local Loop (A) 14-Remote Loop (B)11-Unassigned3-Spare 21-Spare3-Spare 21-Spare12-Sec. Carrier Detect10-Local Loop (A) 14-Remote Loop (B)14-Sec. Transmitted Data14-Sec. Transmitted DataY-TX Signal Element Timing o-TX Signal Element Timing5-Send Timing (A) DCE Source 23-Send Timing (B) DCE Source	25 Pin	34 Pin	37 Pin
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TestingTesting10-Reserved for Testing20-Receive Common10-Reserved for Testing10-Local Loop (A) 14-Remote Loop (B)11-Unassigned3-Spare 21-Spare12-Sec. Carrier Detect32-Select Standby13-Sec. Clear to Send10-Local Loop (A) 21-Spare14-Sec. Transmitted Data5-Send Timing (A) DCE Source 23-Send Timing (B) DCE Source	8-Carrier Detect	0	
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14-Remote Loop (B)11-Unassigned3-Spare 21-Spare12-Sec. Carrier Detect32-Select Standby13-Sec. Clear to Send14-Sec. Transmitted Data14-Sec. Transmitted Data5-Send Timing (A) DCE Source 23-Send Timing (B) DCE Source15-Transmit Clock (DCE Source)Y-TX Signal Element Timing o-TX Signal Element Timing			20–Receive Common
12-Sec. Carrier Detect21-Spare13-Sec. Clear to Send32-Select Standby14-Sec. Transmitted Data	10–Reserved for Testing		
13-Sec. Clear to Send       14-Sec. Transmitted         14-Sec. Transmitted       2000000000000000000000000000000000000	11–Unassigned		
14-Sec. Transmitted Data     Y-TX Signal Element       15-Transmit Clock (DCE Source)     Y-TX Signal Element       5-Send Timing (A) DCE Source       23-Send Timing (B) DCE       Source	12–Sec. Carrier Detect		32–Select Standby
Data     5-Send Timing (A) DCE Source       15-Transmit Clock (DCE Source)     Y-TX Signal Element Timing o-TX Signal Element Timing     5-Send Timing (B) DCE Source	13–Sec. Clear to Send		
Source) Timing 23–Send Timing (B) DCE o–TX Signal Element Source			
16–Sec. Received Data		Timing o–TX Signal Element	23–Send Timing (B) DCE
	16–Sec. Received Data		

# Breakout Box, LEDs, and Connectors B

RS-232C/CCITT V.24	CCITT V.35	RS-449
25 Pin	34 Pin	37 Pin
17–Receive Clock	V–RX Signal Element X–RX Signal Element	8–Receive Timing (A) 26–Receive Timing (B)
18–Unassigned		18–Test Mode (A) 28–Term in Service (A) 34–New Signal
19–Sec. Request to Send		
20–Data Terminal Ready		12–Terminal Ready (A) 30–Terminal Ready (B)
21–Signal Quality Detector		33–Signal Quality (A)
22–Ring Indicator		15–Incoming Call (A)
23–Data Signal Rate Selector		2–Signaling Rate Indicator (A)
		16–Signaling Rate Selector (A)
24–Transmit Clock (DTE Source)		17–Terminal Timing (A) 35–Terminal Timing (B)
25–Busy		36–Stand by Indicator

**B** Breakout Box, LEDs, and Connectors

# AUI — 100Base-T



Pin	Circuit Name	Use
1	CI-S	Control In circuit Shield
2	CI-A	Control In circuit A
3	DO-A	Data Out circuit A
4	DI-S	Data In circuit Shield
5	DI-A	Data In circuit A
6	VC	Voltage Common
7	CO-A	Control Out circuit A
8	CO-S	Control Out circuit Shield
9	CI-B	Control In circuit B
10	DO-B	Data Out circuit B
11	DO-S	Data Out circuit Shield
12	DI-B	Data In circuit B
13	VP	Voltage Plus
14	VS	Voltage Shield
15	CO-B	Control Out circuit B
SHELL	PG	Protection Ground
		(Conductive Shell)

#### Breakout Box, LEDs, and Connectors B

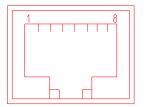
### MII — 100Base-T



Pin	Circuit Name	Pin	Circuit Name
1	+5 V	21	+5 V
2	MDIO	22	COMMON
3	MDC	23	COMMON
4	RXD<3>	24	COMMON
5	RXD<2>	25	COMMON
6	RXD<1>	26	COMMON
7	RXD<0>	27	COMMON
8	RX_DV	28	COMMON
9	RX_CLK	29	COMMON
10	RX_ER	30	COMMON
11	TX_ER	31	COMMON
12	TX_CLK	32	COMMON
13	TX_EN	33	COMMON
14	TXD<0>	34	COMMON
15	TXD<1>	35	COMMON
16	TXD<2>	36	COMMON
17	TXD<3>	37	COMMON
18	COL	38	COMMON
19	CRS	39	COMMON
20	+5 V	40	+5 V

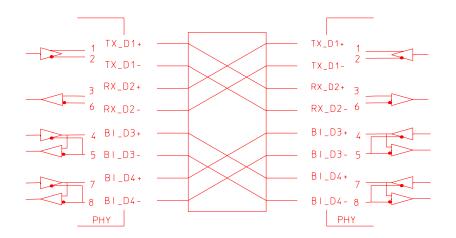
**B** Breakout Box, LEDs, and Connectors

### MDI — 100Base-TX



Pin	Circuit Name
1	TX_D1+
2	TX_D1-
3	RX_D2+
4	BI_D3+
5	BI_D3-
6	RX_D2-
7	BI_D4+
8	BI_D4-

#### Crossover Function





С

Declarations of Conformity 76 Laser Safety Statements 110 Safety Information for Laser Source Modules 111



Agilent Technologies

## **Declarations of Conformity**

### J1990A Full Duplex Ethernet Tap

Manufacturer'	s Name		Agilent Technologies, Inc.		
		Network Systems Test Division (NSTD) 5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America			
Declares that	the proc	luct,			
Product Nan Model Numb	ne:		Duplex Ethernet Tap 0A		
Product Opt	ions:	This	declaration covers all options	s of the above product.	
Conforms wit	h the fol	lowin	g product standards:		
EMC (Technical			rewith complies with the requireme B/EEC) and carries the CE Marking		
Construction File)	Against:		EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:199		
	As detai	led in:	Electromagnetic Compatibility (El 1080/1/CBR, based on Technical Program reference A-2961-2388-	Construction File (TCF) No	. NSTD-EMC
	Assesse	d by:	EMC Test Center, York EMC Ser Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ	vices Limited Appointed Co Inited Kingdom	mpetent Body
Safety			990 + A1:1992 + A2:1995 / EN 610 N C22.2 No. 1010.1:1992	10-1:1993 + A2:1995	
Supplemental	Informa	tion:			
				ul f More	
27 November 2	2001		Neil '	Yosinski	
Date		-	Name		
			Regu Title	Ilatory Manager	
For further in	formation,	please	e contact your local Agilent Technol	ogies sales office, agent, o	r distributor.
Revision: A.00.00			Issue Date: 27 NOV 2001	Document No. J19	

### J2294C CEPT-E1 DB9 & RJ-45 Interface Module

Manufacturer	's Name	Agilent Technologies, Inc.		
Manufacturer	's Addr	ss: Network Systems Test Division (NSTD)		
		5070 Centennial Boulevard Colorado Springs, Colorado 80919		
		United States of America		
Declares that	the pro	duct,		
Product Na Model Num		CEPT-E1 DB9 & RJ-45 Balanced Module		
Product Op		This declaration covers all options of the above product.		
Conforms wit	th the fo	llowing product standards:		
EMC (Technicai Construction		uct herewith complies with the requirements of the EMC Directive 89/336/EEC 93/68/EEC) and carries the CE Marking accordingly (European Union).		
File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997		
	As detail	ed in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.		
	Assesse	I by: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom		
Safety		0-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 3: CSA C22.2 No. 1010 1:1992		
Supplementa	linform			
Supplementa				
		Med of Mount		
19 February 20	002	Neil Yosinski		
Date		Name		
		Regulatory Manager		
E - futber in	formation,	please contact your local Agilent Technologies sales office, agent, or distributor.		
For further in				
Revision: A.00.00		Issue Date: 19 FEB 2002 Document No. J2294C-DoC-A.00.0		

### J2294D, J2296D, J2298D E1 and T1 Interface Modules

Manufacturer	's Name:	Agilent Technologies, Inc.	
Manufacturer	's Address:	Network Systems Test Divis 5070 Centennial Boulevard Colorado Springs, Colorado United States of America	
Declares that	the product	8,	
Product Nar			ohms, and E1/T1 RJ-45/RJ-48C/mini-
Model Numi		am Interface Modules 4D, J2296D, and J2298D	
Product Opt	tions: This	declaration covers all option	s of the above product.
Conform with		a naduct standarda.	
Conform with EMC (Technical Construction File)	The product he	••	ents of the EMC Directive 89/336/EEC g accordingly (European Union).
	Against:	EMC test specifications EN 5501	1:1991 (Group 1, Class A) and EN 61326:199
	As detailed in:	1080/1/CBR, based on Technical	MC) Certificate of Conformance Report No. I Construction File (TCF) No. NSTD-EMC -100 Revision A, dated 6 June 2001.
	Assessed by:	EMC Test Center, York EMC Ser Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ	vices Limited Appointed Competent Body United Kingdom
Safety		990 + A1:1992 + A2:1995 / EN 610 1 C22.2 No. 1010.1:1992	010-1:1993 + A2:1995
Supplementa	I Information	1:	
			Led A your
19 February 20	02	Neil	Yosinski
Date		Name	
			ulatory Manager
		Title	
For further inf	ormation, please	e contact your local Agilent Techno	logies sales office, agent, or distributor.
		Issue Date: 19 FEB 2002	Document No. J229xD-DoC-A.00.00

#### J2300D Advisor WAN

	echnologies	According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014			
Manufacture	's Name:	Agilent Technologies, Inc.			
Manufacture	r's Addrea	se: Network Systems Test Division (NSTD) 5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America			
Declares that	the prod	luct,			
Model Number: J23		Agilent Advisor - WAN 12300D This declaration covers all options of the above product.			
EMC (Technical	The produ	lowing product standards: ict herewith complies with the requirements of the EMC Directive 89/336/EEC 93/68/EEC) and carries the CE Marking accordingly (European Union).			
Construction File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997			
·	As detailed	d in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.			
	Assessed	by: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom			
Safety		0-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 : CSA C22.2 No. 1010.1:1992			
Supplementa	i informa	ition:			
		Min A your			
<u>19 February 20</u> Date	002	Neil Yosinski Name			
	002	Neil Yosinski			
Date		Neil Yosinski Name Regulatory Manager			

### J2300E Advisor WAN

Manufacturer	's Name:	Agilent Technologies, Inc.
Manufacturer	's Address:	Network Systems Test Division (NSTD) 5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America
Declares that	the product	ta a
Product Nan Model Numb Product Opt	<b>Der:</b> J230	ent Advisor - WAN IOE declaration covers all options of the above product.
Conforms wit	h the follow	ing product standards:
EMC (Technical Construction	The product he	rewith complies with the requirements of the EMC Directive 89/336/EEC 8/EEC) and carries the CE Marking accordingly (European Union).
File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:199.
	As detailed in:	Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.
	Assessed by:	EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom
Safety		990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 A C22.2 No. 1010.1:1992
Supplemental	Information	1:
		Med of your
19 February 20 Date	02	Neil Yosinski Name
		Regulatory Manager
For further inf	ormation, please	e contact your local Agilent Technologies sales office, agent, or distributor.

### J2306B, J2309B LAN Ethernet and Eth/Token Ring Undercradle

Agilent Te	echnologies		OF CONFORMITY 2 and CEN/CENELEC EN 45014	CE	
Manufacture	r's Name:	Agilent Technologies,	Inc.		
Manufacture	r's Addre:	s: Network Systems Test 5070 Centennial Bould Colorado Springs, Col United States of Amer	evard Iorado 80919		
Declares that	t the prod	uct,			
Product Na Model Num Product Op	ber: J	2306B and J2309B	net and Ethernet/Token Rii options of the above produc	0	
Conforms wi	th the foll	owing product standar	ds:		
EMC (Technical			quirements of the EMC Directive Marking accordingly (European U		
Construction File)	Against:	EMC test specifications E	N 55011:1991 (Group 1, Class A	) and EN 61326:199	
	As detailed	1080/1/CBR, based on Te	Electromagnetic Compatibility (EMC) Certificate of Conformance Report N 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.		
	Assessed	by: EMC Test Center, York E Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9		Competent Body	
Safety		-1:1990 + A1:1992 + A2:1995 / CSA C22.2 No. 1010.1:1992	EN 61010-1:1993 + A2:1995		
Supplementa	il Informa	tion:	_		
			Mart Mon		
21 February 20 Date	002		Neil Yosinski Name		
			Regulatory Manager Title		
For further in	formation, pl	ease contact your local Agilent	Fechnologies sales office, agent,	or distributor.	

### J2307A LAN Token Ring Undercradle

Agilent Te	chnologies Ac	DECLARATION OF cording to ISO/IEC Guide 22 and 0		
Manufacturer	's Name:	Agilent Technologies, Inc.		
Manufacturer	's Address:	Network Systems Test Divis	ion (NSTD)	
		5070 Centennial Boulevard Colorado Springs, Colorado	80919	
		United States of America		
Declares that	the produc	t,		
Product Nar		- Token Ring undercradle		
Model Numi Product Opt	0200	07A declaration covers all option	a of the above product	
Flouder op		deciaration covers an option	s of the above product.	
Conforms wit	h the follow	ing product standards:		
EMC (Technical Construction		erewith complies with the requireme 8/EEC) and carries the CE Marking	ents of the EMC Directive 89/336/EEC g accordingly (European Union).	
File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 613		
	As detailed in:	1080/1/CBR, based on Technical	MC) Certificate of Conformance Report No. I Construction File (TCF) No. NSTD-EMC -100 Revision A, dated 6 June 2001.	
	Assessed by:	EMC Test Center, York EMC Ser Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ	vices Limited Appointed Competent Body	
Safety		990 + A1:1992 + A2:1995 / EN 610 A C22.2 No. 1010.1:1992	-	
Supplementa	l Informatio	n:		
		S.	Self your	
19 February 20 Date	02	Neil	Yosinski	
Dale		Name	5	
		Regi Title	ulatory Manager	
For further inf	formation, pleas	e contact your local Agilent Techno	logies sales office, agent, or distributor.	
Revision: A.00.00		Issue Date: 19 FEB 2002	Document No. J2307A-DoC-A.00.0	
100101011.70.00.00				

### J2524A FDDI Undercradle

	echnologie	Ac	cording to ISO/IEC Guide 22 and C	EN/CENELEC EN 45014	
Manufacture	r's Nam	e:	Agilent Technologies, Inc.		
Manufacturei	r's Addı	'855:	Network Systems Test Divis 5070 Centennial Boulevard Colorado Springs, Colorado United States of America		
Declares that	t the pro	oduct			
Model Number: J2		J252			
Product Op	tions:	inis	declaration covers all option	s of the above produc	τ.
Conforms wi	th the fo	ollow	ing product standards:		
EMC (Technical Construction			rewith complies with the requireme 8/EEC) and carries the CE Marking		
File)	Against.		EMC test specifications EN 5501	1:1991 (Group 1, Class A)	and EN 61326:199
	As detai	iled in:	Electromagnetic Compatibility (El 1080/1/CBR, based on Technical Program reference A-2961-2388-	Construction File (TCF) N	IO. NSTD-EMC
	Assesse	nd by:	EMC Test Center, York EMC Ser Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ	vices Limited Appointed C Inited Kingdom	Competent Body
Safety			990 + A1:1992 + A2:1995 / EN 610 1 C22.2 No. 1010.1:1992	10-1:1993 + A2:1995	
Supplementa	l Inform	natio	1:		
				Inf your	
19 February 20	002		Neil	Yosinski	
19 February 2002 Date		-	Name		
Date			Dom	latan Managana	
Date			Title	Ilatory Manager	
	formation,	please		i i	or distributor.

#### J2527A TIMS Undercradle

	710	cording to ISO/IEC Guide 22 and C	
Manufacturer	's Name:	Agilent Technologies, Inc.	
Manufacturer	's Address:	Network Systems Test Divisi	ion (NSTD)
		5070 Centennial Boulevard Colorado Springs, Colorado	80010
		United States of America	00919
Declares that	the product	9	
Product Na Model Numi	, ig//c	ent Advisor - TIMS undercradi 27A	le
Product Op		declaration covers all options	of the above product.
Conforms wit	th the follow	ing product standards:	
EMC (Technical Construction		rewith complies with the requireme 8/EEC) and carries the CE Marking	nts of the EMC Directive 89/336/EEC accordingly (European Union).
File)	Against:	EMC test specifications EN 5501	1:1991 (Group 1, Class A) and EN 61326:19
	As detailed in:	1080/1/CBR, based on Technical	IC) Certificate of Conformance Report No. Construction File (TCF) No. NSTD-EMC 100 Revision A, dated 6 June 2001.
	Assessed by:	EMC Test Center, York EMC Serv Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ	rices Limited Appointed Competent Body Inited Kingdom
Safety		990 + A1:1992 + A2:1995 / EN 610 A C22.2 No. 1010.1:1992	-
Supplementa	l Information	1:	
			Inf your
19 February 20	02	Neil	rosinski
Date		Name	
		Regu Title	latory Manager
For further int	formation, please	e contact your local Agilent Technol	ogies sales office, agent, or distributor.
		Issue Date: 19 FEB 2002	Document No. J2527A-DoC-A.00.0

### J2900A High Speed Acquisition Undercradle

112.1	echnologies			ONFORMITY	CE	
Manufacture	r's Name	Agilent Tech	nologies, Inc.			
Manufacturer's Address:		5070 Centen Colorado Spl	Network Systems Test Division (NSTD) 5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America			
Declares that	the pro	duct,				
Model Number: J29		J2900A		isition undercradle		
Product Op	tions:	This declaration c	overs all options o	of the above produc	ət.	
Conforms wit	th the fo	llowing product	standards:			
EMC (Technical Construction File)				's of the EMC Directive ccordingly (European L		
	Against:	EMC test spec	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997			
	As detaile	1080/1/CBR, b	based on Technical C	C) Certificate of Conform onstruction File (TCF)   10 Revision A, dated 6	Vo. NSTD-EMC	
	Assessed	Fleming Buildii Donibristle Ind Dalgety Bay	ing	ces Limited Appointed C ited Kingdom	Competent Body	
Safety		: 0-1:1990 + A1:1992 + a: CSA C22.2 No. 101		0- <i>1:1993 + A2:1995</i>		
Supplementa	l Informa	ation:				
			Ma	1 Moren	-	
19 February 20 Date	002		Neil Yo Name	// *		
	002		Name	// *		
Date		please contact your lo	Name Regula Title	osinski	or distributor.	

### J2901A Gigabit Ethernet Undercradle

Agilent Te	chnologies A	DECLARATION OF ccording to ISO/IEC Guide 22 and C		
Manufacturer	's Name:	Agilent Technologies, Inc.		
Manufacturer	's Address	Network Systems Test Divisi 5070 Centennial Boulevard Colorado Springs, Colorado United States of America	. ,	
Declares that	the produc	:ts,		
Product Na Model Numi Product Opt	ber: <i>J29</i>	lent Advisor LAN - Gigabit Etho 01A s declaration covers all options		
Conform with	the follow	ing product standards:		
EMC (Technical Construction File)		nerewith complies with the requireme 68/EEC) and carries the CE Marking	nts of the EMC Directive 89/336/EEC accordingly (European Union).	
	Against:	EMC test specifications EN 5501	1:1991 (Group 1, Class A) and EN 61326:19.	
	As detailed in	1080/1/CBR, based on Technical	IC) Certificate of Conformance Report No. Construction File (TCF) No. NSTD-EMC 100 Revision A, dated 6 June 2001.	
	Assessed by:	EMC Test Center, York EMC Serv Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ U	rices Limited Appointed Competent Body Inited Kingdom	
Safety		IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 Canada: CSA C22.2 No. 1010.1:1992		
Laser/LED	IEC 60825-1:	1993 + A1:1997 / EN 60825-1:1994 ·	+ A11:1996 Class 1	
Supplementa	l Informatio	n:		
		S.	ed of your	
19 February 20	02		rosinski	
Date		Name		
		Regu Title	latory Manager	
For further int	formation, plea	se contact your local Agilent Technol	ogies sales office, agent, or distributor.	
Revision: A.00.00		Issue Date: 19 FEB 2002	Document No. J2901A-DoC-A.00.00	

# J2904B, J2293B/94B/96B/97B/98B/99B ISDN/BERT Interface Modules

M				
Manufacturer	"s name:	Agilent Technologies, Inc.		
Manufacturer	's Addres	Network Systems Test Divisis 5070 Centennial Boulevard Colorado Springs, Colorado United States of America		
Declares that	the prod	icts,		
Product Nar Model Num Product Op	C R bers: J2	DN BRI S/T Simulation/BERT, EPT-E1 DB9 120-ohm balanced I-48C/mini-bantam, and T1 RJ- 904B, J2293B, J2294B, J2296 is declaration covers all option:	d, CEPT-E1 BNC, CEP 45/mini-bantam Interfac B, J2297B, J2298B, an	T-E1 BR-2, T1 ce Modules
Conform with	the follo	ving product standards:		
EMC (Technical Construction		herewith complies with the requireme 3/68/EEC) and carries the CE Marking		
File)	Against:	EMC test specifications EN 5501	1:1991 (Group 1, Class A) a	and EN 61326:19
	As detailed	in: Electromagnetic Compatibility (El 1080/1/CBR, based on Technical Program reference A-2961-2388-	Construction File (TCF) No	NSTD-EMC
	Assessed L	v: EMC Test Center, York EMC Ser Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ L		mpetent Body
Safety		1:1990 + A1:1992 + A2:1995 / EN 610 CSA C22.2 No. 1010.1:1992	10-1:1993 + A2:1995	
Supplementa		Neil	ul f You Yosinski	
Date	_	Name	•	
		Regu Title	ulatory Manager	
For further in	formation, ple	ase contact your local Agilent Technol	logies sales office, agent, or	distributor.
Revision: A.00.00		Issue Date: 19 FEB 2002	Document No. J29	

#### J2905B ISDN BRI S/T and U Interface Module

Agilent Te	chnologies A	DECLARATION OF ccording to ISO/IEC Guide 22 and C	
Manufacturer	's Name:	Agilent Technologies, Inc.	
Manufacturer	's Address:	Network Systems Test Divis 5070 Centennial Boulevard Colorado Springs, Colorado United States of America	. ,
Declares that	the produc	:t,	
Product Nar Model Numi Product Opt	ber: <i>J29</i>		
Product Op	uons: ////s	declaration covers all options	s of the above product.
Conforms wit	h the follow	ving product standards:	
EMC (Technical Construction		erewith complies with the requireme 68/EEC) and carries the CE Marking	nts of the EMC Directive 89/336/EEC accordingly (European Union).
File)	Against:	EMC test specifications EN 5501	1:1991 (Group 1, Class A) and EN 61326:195
	As detailed in.	1080/1/CBR, based on Technical	MC) Certificate of Conformance Report No. Construction File (TCF) No. NSTD-EMC 100 Revision A, dated 6 June 2001.
	Assessed by:	EMC Test Center, York EMC Ser Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ	vices Limited Appointed Competent Body Inited Kingdom
Safety		1990 + A1:1992 + A2:1995 / EN 610 A C22.2 No. 1010.1:1992	10-1:1993 + A2:1995
Supplementa	l Informatio	n:	
		S.	ul A your
19 February 20 Date	02	Neil ` Name	Yosinski
		_Regu Title	ilatory Manager
For further inf	formation, pleas	e contact your local Agilent Technol	ogies sales office, agent, or distributor.
Revision: A.00.00		Issue Date: 19 FEB 2002	Document No. J2905B-DoC-A.00.00

### J2908A DDS 4-Wire Interface Module

Agilent Te	chnologies	DECLARATION OF ( According to ISO/IEC Guide 22 and C		CE	
Manufacturer	's Name:	Agilent Technologies, Inc.			
Manufacturer	's Addres	s: Network Systems Test Divisi 5070 Centennial Boulevard	on (NSTD)		
		Colorado Springs, Colorado United States of America	80919		
Declares that	the produ	ıct,			
Product Na Model Num	ber: J2	nilent Advisor - DDS 4-wire Mod 9908A			
Product Op	tions: Th	nis declaration covers all options	of the above product.		
Conforms wit	th the follo	wing product standards:			
EMC (Technical Construction		herewith complies with the requireme. 3/68/EEC) and carries the CE Marking			
File)	Against:	EMC test specifications EN 5501	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997		
	As detailed .	in: Electromagnetic Compatibility (EM 1080/1/CBR, based on Technical Program reference A-2961-2388-	Construction File (TCF) No. N	STD-EMC	
	Assessed bj	y: EMC Test Center, York EMC Serv Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ U		etent Body	
Safety		1:1990 + A1:1992 + A2:1995 / EN 610: SSA C22.2 No. 1010.1:1992	10-1:1993 + A2:1995		
Supplementa	l Informati	lon:			
		- 	Inf your		
19 February 20	02		osinski		
<u>19 February 20</u> Date	002	Name	Yosinski latory Manager		
Date		Name Regu Title	latory Manager		
Date		Name	latory Manager		

#### J2909A ATM DS-3/E3 Interface Module

Manufacturer	's Name	: Agilent Te	echnologies, Ind	2.		
Manufacturer	's Addre		Systems Test D Intennial Bouleva		7)	
			Springs, Colora			
			ates of America			
Declares that	the proc	duct,				
Product Na Model Numi		Agilent Advisol 12909A	r ATM - DS-3/E	3 Module		
Product Op			on covers all opt	ions of the a	bove product.	
Conforms wit	th the fol	llowing prod	uct standards	:		
EMC (Technical Construction			plies with the requi carries the CE Ma			
File)	Against:	EMC test s	specifications EN 3	5011:1991 (Gro	oup 1, Class A) a	and EN 61326:199
	As detaile	1080/1/CB	gnetic Compatibilit BR, based on Tech eference A-2961-2	nical Constructio	on File (TCF) No	NSTD-EMC
	Assessea	Fleming Bl Donibristle Dalgety Ba	Industrial Park			mpetent Body
Safety		0-1:1990 + A1:19 : CSA C22.2 No.	92 + A2:1995 / EN 1010.1:1992	61010-1:1993	+ A2:1995	
Supplementa	l Informa	ation:				
				_		
			4	Mul A M	m	
19 February 20	02		Ν	leil Yosinski		
Date			N	ame		
				egulatory Ma	anager	
			T	itle		
For further int	formation, p	please contact you	ur local Agilent Teo	hnologies sales	office, agent, o	distributor.
			ate: 19 FEB 2002			09A-DoC-A.00.00

### J2912A ATM OC-3c/STM-1 Interface Module

Manufacturer	's Name:	Agilent Technologies, Inc.		
Manufacturer	's Address	Network Systems Test Division (NSTD) 5070 Centennial Boulevard		
		Colorado Springs, Colorado 80919 United States of America		
Declares that	the produ	cts,		
Product Na Model Numi	ber: <i>J2</i> :	ilent Advisor ATM - OC-3c / STM-1 module 912A		
Product Op	tions: Th	is declaration covers all options of the above products.		
Conform with	the follow	ring product standards:		
EMC (Technical Construction		herewith complies with the requirements of the EMC Directive 89/336/EEC /68/EEC) and carries the CE Marking accordingly (European Union).		
File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:199		
	As detailed ii	Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.		
	Assessed by	: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, File KY11 9HZ United Kingdom		
Safety		1010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 Jada: CSA C22.2 No. 1010.1:1992		
Laser/LED	IEC 60825-1	:1993 + A1:1997 / EN 60825-1:1994 + A11:1996 Class 1		
Supplementa	i informati			
10 Eobruony 20	0.2	Mail Mon		
19 February 20 Date		Neil Yosinski Name		
		Regulatory Manager		
For further in	formation, plea	se contact your local Agilent Technologies sales office, agent, or distributor.		
Revision: A.00.00		Issue Date: 19 FEB 2002 Document No. J2912A-DoC-A.00.00		

### J2912B ATM OC-3c/STM-1 Interface Module

	7.0	cording to ISO/IEC Guide 22 and C	
Manufacturer	's Name:	Agilent Technologies, Inc.	
Manufacturer's Address:		5070 Centennial Boulevard	
		Colorado Springs, Colorado United States of America	80919
Declares that	the product	s,	
Product Nar Model Numi	ber: <i>J291</i>	ent Advisor ATM - OC-3c / ST 12B	TM-1 module
Product Opt	tions: This	declaration covers all option	s of the above products.
Conform with	the followi	ng product standards:	
EMC (Technical Construction		prewith complies with the requireme 8/EEC) and carries the CE Marking	ents of the EMC Directive 89/336/EEC a accordingly (European Union).
Construction File)	Against:	EMC test specifications EN 5501	1:1991 (Group 1, Class A) and EN 61326:199
	As detailed in:	1080/1/CBR, based on Technical	MC) Certificate of Conformance Report No. Construction File (TCF) No. NSTD-EMC 100 Revision A, dated 6 June 2001.
	Assessed by:	EMC Test Center, York EMC Ser Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ	vices Limited Appointed Competent Body Inited Kingdom
Safety	IEC 61010-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 Canada: CSA C22.2 No. 1010.1:1992		
Laser/LED	IEC 60825-1:1	993 + A1:1997 / EN 60825-1:1994	+ A11:1996 Class 1
Supplementa	l Informatio	n:	
		S.	Red of your
19 February 20	02		Yosinski
Date		Name	
			ulatory Manager
		Title	
For further inf	formation, please	e contact your local Agilent Techno	logies sales office, agent, or distributor.
Revision: A.00.00		Issue Date: 19 FEB 2002	Document No. J2912B-DoC-A.00.00

### J2913A ATM 155-UTP Interface Module

Aglient le	chnologies	DECLARATION O According to ISO/IEC Guide 22 ar		CE
Manufacturer	's Name:	Agilent Technologies, Inc	<u>.</u>	
Manufacturer	's Addres	S: Network Systems Test Di 5070 Centennial Bouleva Colorado Springs, Colora United States of America	rd	
Declares that	the prod	uct,		
Product Nan Model Numb	Der: J2	gilent Advisor ATM - 155-UT 2913A		
Product Opt	lions: 77	his declaration covers all opti	ions of the above product.	
Conforms wit	h the foll	owing product standards:	:	
EMC (Technical Construction		t herewith complies with the require 3/68/EEC) and carries the CE Mar		
File)	Against:	EMC test specifications EN 5	5011:1991 (Group 1, Class A) a	nd EN 61326:199
	As detailed		r (EMC) Certificate of Conformal ical Construction File (TCF) No. 888-100 Revision A, dated 6 Jul	NSTD-EMC
	Assessed L	y: EMC Test Center, York EMC Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ	Services Limited Appointed Cor United Kingdom	npetent Body
Safety		1:1990 + A1:1992 + A2:1995 / EN CSA C22.2 No. 1010.1:1992	61010-1:1993 + A2:1995	
Supplemental	l Informat	lon:		
			Med & More	
19 February 20	02		eil Yosinski	
Date		Na	ame	
			egulatory Manager <sup>tle</sup>	
For further inf	ormation, ple	ase contact your local Agilent Tecl	hnologies sales office, agent, or	distributor.

### J2913B ATM 155-UTP Interface Module

Manufacturer	's Name:	Agilent Technologies, Inc.
Manufacturer	's Address:	Network Systems Test Division (NSTD) 5070 Centennial Boulevard
		Colorado Springs, Colorado 80919
		United States of America
Declares that	the produc	st,
Product Nar	, .g.,	lent Advisor ATM - 155-UTP Module
Model Numi Product Opt	020	13B de la chima a company a l'actions a fitte a base and de f
Product Opt		s declaration covers all options of the above product.
Conforms wit	h the follow	wing product standards:
EMC (Technical Construction		ierewith complies with the requirements of the EMC Directive 89/336/EEC 68/EEC) and carries the CE Marking accordingly (European Union).
File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:
	As detailed in.	: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.
	Assessed by:	EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom
Safety		24.11.01.11.1992 + A2:1995 / EN 61010-1:1993 + A2:1995 SA C22.2 No. 1010.1:1992
Supplementa	i informatio	on:
		Mind & Moren
19 February 20	02	Neil Yosinski
Date		Name
		Regulatory Manager
⊢or further inf	formation, pleas	se contact your local Agilent Technologies sales office, agent, or distributor.

#### J2914A STM-1e Interface Module

Agriciit ie	chnologies	DECLARATION OF CONFORMITY           According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014		
Manufacturer	's Name:	Agilent Technologies, Inc.		
Manufacturer	's Addres	s: Network Systems Test Division (NSTD)		
		5070 Centennial Boulevard Colorado Springs, Colorado 80919		
		United States of America		
Declares that	the produ	uct,		
Product Na Model Numi		gilent Advisor STM-1e/EC-3 Module 2914A		
Product Opt	tions: 7/	his declaration covers all options of the above product.		
Conforms wit	h the follo	owing product standards:		
EMC (Technical Construction		t herewith complies with the requirements of the EMC Directive 89/336/EEC 3/68/EEC) and carries the CE Marking accordingly (European Union).		
File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997		
	As detailed	in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.		
	Assessed b	y: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom		
Safety		1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 CSA C22.2 No. 1010 1:1992		
Supplemental	l Informat	lon:		
		Med & your		
19 February 20	02	Neil Yosinski		
19 February 20 Date	02	Neil Yosinski Name		
	02			
Date		Name Regulatory Manager		

### J3444A Fast Ethernet LAN Undercradle

Agilent Te	chnologies	DECLARATION OF CONFORMITY           According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014
Manufacturer	's Name:	Agilent Technologies, Inc.
Manufacturer	's Addres	s: Network Systems Test Division (NSTD) 5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America
Declares that	the prod	uct,
Product Nar Model Numi	ber: J	gilent Advisor LAN - Fast Ethernet undercradle 8444A
Product Opt	tions: /	his declaration covers all options of the above product.
Conforms wit	the foll	owing product standards:
EMC (Technical Construction		t herewith complies with the requirements of the EMC Directive 89/336/EEC 3/68/EEC) and carries the CE Marking accordingly (European Union).
File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:199
	As detaileo	in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.
	Assessed L	y: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom
Safety		1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 CSA C22.2 No. 1010.1:1992
Supplementa	l Informat	lon:
		Med of your
19 February 20 Date	02	Neil Yosinski Name
		Regulatory Manager
For further inf	formation, ple	ease contact your local Agilent Technologies sales office, agent, or distributor.
Revision: A.00.00		Issue Date: 19 FEB 2002 Document No. J3444A-DoC-A.00.00

### J3445A 100Base-FX Interface Module

Manufacturer	's Name:	Agilent Technologies, Inc.
Manufacturer	's Address	Network Systems Test Division (NSTD)     5070 Centennial Boulevard
		Colorado Springs, Colorado 80919
		United States of America
Declares that	the produ	ct,
Product Nar Model Numi		illent Advisor LAN - 100Base-FX interface module 445A
Product Opt	tions: Th	is declaration covers all options of the above product.
Conforms wit	h the folio	wing product standards:
EMC (Technicai Construction		herewith complies with the requirements of the EMC Directive 89/336/EEC \68/EEC) and carries the CE Marking accordingly (European Union).
File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:199
	As detailed i	n: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.
	Assessed by	r: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom
Safety		21990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 SSA C22.2 No. 1010.1:1992
Supplementa	l Informati	on:
		Med A your
10 Echruony 20	02	
19 February 20 Date	02	Neil Yosinski Name
		Regulatory Manager
For further inf	formation. plea	ase contact your local Agilent Technologies sales office, agent, or distributor.
Revision: A.00.00		Issue Date: 19 FEB 2002 Document No. J3445A-DoC-A.00.00

#### J3446D Advisor LAN

· · · ·	chnologies	According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014		
Manufacturer'	's Name:	Agilent Technologies, Inc.		
Manufacturer	's Addres	s: Network Systems Test Division (NSTD) 5070 Centennial Boulevard Colorado Springs, Colorado 80919		
		United States of America		
Declares that	the prod	uct,		
Product Nan Model Numb	<i>.</i>	gilent Advisor LAN - 10/100 Ethernet 3446D		
Product Opt	tions: 7	his declaration covers all options of the above product.		
Conforms wit	h the foll	owing product standards:		
EMC (Technical	The produc	t herewith complies with the requirements of the EMC Directive 89/336/EEC 3/68/EEC) and carries the CE Marking accordingly (European Union).		
Construction File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997		
	As detailed	in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.		
	Assessed L	y: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom		
Safety		1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 CSA C22.2 No. 1010.1:1992		
Supplemental	l Informat	lon:		
		M. J. Marin		
19 February 2002		Neil Yosinski		
Date		Name		
		Regulatory Manager Title		
For further info	ormation, ple	ease contact your local Agilent Technologies sales office, agent, or distributor.		

#### J3446E Advisor LAN

Aquent recimologies		According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014			
Manufacturer	's Name:	Agilent Technologies, Inc.			
Manufacturer	r's Addres:	s: Network Systems Test Division (NSTD) 5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America			
Declares that	the produ	ict,			
Product Na Model Num	ber: <i>J3</i>	illent Advisor LAN - 10/100 Ethernet 446E			
Product Op	tions: //	is declaration covers all options of the above product.			
Conforms wit	th the follo	wing product standards:			
EMC (Technical Construction		herewith complies with the requirements of the EMC Directive 89/336/EEC V68/EEC) and carries the CE Marking accordingly (European Union).			
File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997			
	As detailed i	in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.			
	Assessed by	v: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom			
Safety		1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 SA C22.2 No. 1010.1:1992			
Supplementa	i informati	on:			
10 Echrupy 20	002	Mul A Norm			
19 February 20 Date	002	Neil Yosinski Neil Yosinski Name			
	002	Neil Yosinski			
Date		Neil Yosinski Name Regulatory Manager			

### J3447A LAN 100BaseFX Interface Module

Aqueint recimologies		DECLARATION OF CONFORMITY           According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014				
Manufacturer	's Name:	Agilent Technologies, Inc.				
Manufacturer	's Addres	s: Network Systems Test Division (NSTD) 5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America				
Declares that	the prod	uct,				
Product Na Model Num	ber: J	gilent Advisor LAN - 100Base FX Interface module 3447A				
Product Op	tions: 7	his declaration covers all options of the above product.				
Conforms wit	th the foll	owing product standards:				
EMC (Technical Construction		t herewith complies with the requirements of the EMC Directive 89/336/EEC 13/68/EEC) and carries the CE Marking accordingly (European Union).				
File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997				
	As detailed	in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.				
	Assessed I	by: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom				
Safety		.1:1990 + А1:1992 + А2:1995 / EN 61010-1:1993 + А2:1995 CSA C22.2 No. 1010.1:1992				
Supplementa	l Informat	tion:				
		M/A Maria				
		- MAN A MAC				
19 February 20 Date	002	Name				
	002					
Date		Name Regulatory Manager				

#### J3759A DS-3/E3 Cells & Frames Interface Module

Manufacturer	's Nam	e:	Agilent Technologies, Inc.			
Manufacturer	's Addı	'ess:	Network Systems Test Divis			
			5070 Centennial Boulevard Colorado Springs, Colorado			
			United States of America	00070		
Declares that	the pro	oduct	9			
Product Na Model Num		Agile J375	nt Advisor WAN - DS-3/E3 ( 9A	Cells & Frames module		
Product Op	tions:	This	declaration covers all option	s of the above product.		
Conforms wit	th the fo	ollow	ing product standards:			
EMC (Technical Construction			rewith complies with the requiremo 8/EEC) and carries the CE Marking	ents of the EMC Directive 89/336/EEC g accordingly (European Union).		
Construction File)	Against:		EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997			
	As detai	iled in:	1080/1/CBR, based on Technica	MC) Certificate of Conformance Report No. I Construction File (TCF) No. NSTD-EMC -100 Revision A, dated 6 June 2001.		
	Assesse	ed by:	EMC Test Center, York EMC Ser Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ	rvices Limited Appointed Competent Body		
Safety			2990 + A1:1992 + A2:1995 / EN 610 C22.2 No. 1010.1:1992	-		
Supplementa	l Inform	natior	:			
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10 5-6	000		U J	11 *		
19 February 20 Date	JU2	_	Name	Posinskie		
			Reg	ulatory Manager		
For further in	formation	nless	contact your local Agilent Toshos	ologies sales office, agent, or distributor.		
		piease	Issue Date: 19 FEB 2002	Document No. J3759A-DoC-A.00.00		
Revision: A.00.00						

#### J3759B DS-3/E3 Cells & Frames Interface Module

Manufacturer	'e Namo'	Agilent Technologies, Inc.		
		0		
Manufacturer	's Address:	Network Systems Test Division 5070 Centennial Boulevard	(NSTD)	
		Colorado Springs, Colorado 8	0919	
		United States of America		
Declares that	the product			
Product Nar Model Numi		ent Advisor WAN - DS-3/E3 Cell. 19B	s & Frames module	
Product Opt	tions: This	declaration covers all options of	f the above product.	
Conforms wit	h the follow	ing product standards:		
EMC		rewith complies with the requirements	of the EMC Directive 89/336/EEC	
(Technical Construction	(including 93/6	8/EEC) and carries the CE Marking ac	cordingly (European Union).	
File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997		
	As detailed in:		Certificate of Conformance Report No. nstruction File (TCF) No. NSTD-EMC 9 Revision A, dated 6 June 2001.	
	Assessed by:	Fleming Building Donibristle Industrial Park Dalgety Bay	ns Limited Appointed Competent Body ad Kingdom	
Safety		990 + A1:1992 + A2:1995 / EN 61010- 1 C22:2 No. 1010.1:1992	0	
Supplementa	I Informatio	1:		
		Mint	A More	
19 February 20	02	Neil Yos	sinski	
Date		Name		
		Regulat	ory Manager	
		Title		
For further inf	ormation, please	e contact your local Agilent Technologi	es sales office, agent, or distributor.	

### J3762A HSSI Interface Module

Manufacturer	's Name		Agilent Technologies, Inc.	
		-	0 0	
Manufacturer	's Addre	88:	Network Systems Test Divis 5070 Centennial Boulevard	
			Colorado Springs, Colorado	
			United States of America	
Declares that	the pro	duct	,	
Product Na			nt Advisor WAN - HSSI mod	dule
Model Num		J376		
Product Op	tions:	This	declaration covers all optior	ns of the above product.
Conforms wit	th the fo	llow	ing product standards:	
EMC (Technical Construction			rewith complies with the requirem 3/EEC) and carries the CE Markin	nents of the EMC Directive 89/336/EEC ng accordingly (European Union).
File)	Against:		EMC test specifications EN 550	11:1991 (Group 1, Class A) and EN 61326:199
	As detaile	nd in:	1080/1/CBR, based on Technica	EMC) Certificate of Conformance Report No. al Construction File (TCF) No. NSTD-EMC 8-100 Revision A, dated 6 June 2001.
	Assessed	l by:	EMC Test Center, York EMC Se Fleming Building Donibristle Industrial Park Dalgety Bay	ervices Limited Appointed Competent Body
			Dunfermine, Fife KY11 9HZ	United Kingdom
Safety			090 + A1:1992 + A2:1995 / EN 61   C22.2 No. 1010.1:1992	010-1:1993 + A2:1995
Supplementa	l Informa	atior	:	
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			5	Med of your
19 February 20	02		Neil	l Yosinski
Date			Nam	
				gulatory Manager
			Title	
For further in	formation, p	lease	contact your local Agilent Techno	ologies sales office, agent, or distributor.
			Issue Date: 19 FEB 2002	Document No. J3762A-DoC-A.00.00

### J3762B HSSI Interface Module

Agnetit te	chnologies	According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014			
Manufacturer	's Name:	Agilent Technologies, Inc.			
		Network Systems Test Division (NSTD) 5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America			
Declares that	the prod	uct,			
Product Na Model Numi Product Op	ber:	gilent Advisor WAN - HSSI module 3762B This declaration covers all options of the above product.			
0					
EMC (Technical	The produ	owing product standards: ct herewith complies with the requirements of the EMC Directive 89/336/EEC 93/68/EEC) and carries the CE Marking accordingly (European Union).			
Construction File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:199			
	As detailee	I in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.			
	Assessed	by: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom			
Safety		-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 CSA C22.2 No. 1010.1:1992			
Supplementa	l Informa	tion:			
10 5 1		Man of Your			
19 February 20 Date	02	Neil Yosinski Name			
		Regulatory Manager Title			
For further in	formation, p	ease contact your local Agilent Technologies sales office, agent, or distributor.			
Revision: A.00.00		Issue Date: 19 FEB 2002 Document No. J3762B-DoC-A.00.00			

# J3763A, J3764A ATM 622 Undercradle and OC-12/STM-4c Interface Module

Agilent Te	cnnologi	Ac	cording to ISO/IEC Guide 22 and CEN/CENELEC EN 45014			
Manufacturer's Name:		10:	Agilent Technologies, Inc.			
Manufacturer	Manufacturer's Address:		Network Systems Test Division (NSTD)			
			5070 Centennial Boulevard			
			Colorado Springs, Colorado 80919			
			United States of America			
Declares that	the pr	oduci	18,			
Product Nar Model Numi			1 622 undercradle and OC-12c/STM-4c single-mode optical module			
Product Opt			3763A and J3764A This declaration covers all options of the above products.			
Conform with	the fo	llowl	ng product standards:			
EMC			are product standards.			
(Technical Construction		-	8/EEC) and carries the CE Marking accordingly (European Union).			
File)	Against:		EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997			
	As detailed III.		Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.			
	Assess	ed by:	EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building			
			Donibristle Industrial Park			
			Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom			
Safety			990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 A C22.2 No. 1010.1:1992			
Laser/LED	IEC 60825-1:19		993 + A1:1997 / EN 60825-1:1994 + A11:1996 Class 1			
Supplementa	l Infori	natio	n:			
			Mad & your			
16 October 200	)1		Neil Yosinski			
Date		_	Name			
			Regulatory Manager			
			Title			
For further inf	ormatior	n, please	e contact your local Agilent Technologies sales office, agent, or distributor.			

### J3766A ATM25 Interface Module

Agnent le	chnologies	According to ISO/IEC Guide 22 and CEN/CENELEC EN 45014		
Manufacturer	's Name:	Agilent Technologies, Inc.		
Manufacturer	's Address	: Network Systems Test Division (NSTD) 5070 Centennial Boulevard		
		Colorado Springs, Colorado 80919 United States of America		
Declares that	the produ	ct,		
Product Nar Model Numi	, ig	ilent Advisor WAN - ATM25 module 766A		
Product Opt	tions: Th	is declaration covers all options of the above product.		
Conforms wit	h the follo	wing product standards:		
EMC (Technical		herewith complies with the requirements of the EMC Directive 89/336/EEC V68/EEC) and carries the CE Marking accordingly (European Union).		
Construction File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997		
	As detailed i	n: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.		
	Assessed by	:: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, File KY11 9HZ United Kingdom		
Safety		1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 SA C22:2 No. 1010.1:1992		
Supplemental	l Informati	on:		
40 5 1 00		Men A Norm		
19 February 20 Date	02	<u>Neil Yosinski</u> Name		
		Regulatory Manager		
For further inf	formation, plea	ase contact your local Agilent Technologies sales office, agent, or distributor.		
Revision: A.00.00		Issue Date: 19 FEB 2002 Document No. J3766A-DoC-A.00.00		
Revision. A.00.00				

### J4630A VQT Undercradle

Manufacturer	's Name:	Agilent Technologies, Inc.
Manufacturer	's Addres	s: Network Systems Test Division (NSTD)
Manufacturer	o Autica	5070 Centennial Boulevard
		Colorado Springs, Colorado 80919 United States of America
Declares that	the prod	uct,
Product Nar Model Numi	ber: J4	nalog FXO / E&M - VQT undercradle 4630A
Product Opt	tions: 7	his declaration covers all options of the above product.
Conforms wit	h the foll	owing product standards:
EMC (Technicai Construction	The produc	ct herewilh complies with the requirements of the EMC Directive 89/336/EEC 03/68/EEC) and carries the CE Marking accordingly (European Union).
File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:199
	As detailed	in: Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.
	Assessed L	by: EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, Fife KY11 9HZ United Kingdom
Safety		-1:1990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 CSA C22.2 No. 1010.1:1992
Supplementa	l Informat	tion:
		M111 -5
	~~	Med & Norm
19 February 20 Date	02	Neil Yosinski Name
		Regulatory Manager
For further inf	formation, ple	ease contact your local Agilent Technologies sales office, agent, or distributor.

### J4646A/47A and J4648A/49A E1 and T1 ISDN PRI Interface Modules

Manufacturer	's Name:	Agilent Technologies, Inc.
Manufacturer		Network Systems Test Division (NSTD) 5070 Centennial Boulevard Colorado Springs, Colorado 80919 United States of America
Declares that	the product	s,
Product Nar Model Numi Product Opt	T1 /S bers: J464	SDN PRI modules (Unbalanced BNC / Balanced DB9/RJ45) and SDN PRI modules (Bal. Bantam/RJ48C / Bal. Bantam/RJ45C) 6A/J4647A and J4648A/J4649A declaration covers all options of the above product.
Conform with	the followir	ng product standards:
EMC (Technical		rewith complies with the requirements of the EMC Directive 89/336/EEC 8/EEC) and carries the CE Marking accordingly (European Union).
Construction File)	Against:	EMC test specifications EN 55011:1991 (Group 1, Class A) and EN 61326:1997
	As detailed in:	Electromagnetic Compatibility (EMC) Certificate of Conformance Report No. 1080/1/CBR, based on Technical Construction File (TCF) No. NSTD-EMC Program reference A-2961-2388-100 Revision A, dated 6 June 2001.
	Assessed by:	EMC Test Center, York EMC Services Limited Appointed Competent Body Fleming Building Donibristle Industrial Park Dalgety Bay Dunfermine, File KY11 9HZ United Kingdom
Safety		990 + A1:1992 + A2:1995 / EN 61010-1:1993 + A2:1995 \ C22.2 No. 1010.1:1992
Supplementa	I Informatior	1:
		Med & your
19 February 20 <sup>Date</sup>	02	Neil Yosinski Name
		Regulatory Manager
For further inf	formation, please	e contact your local Agilent Technologies sales office, agent, or distributor. Issue Date: 19 FEB 2002 Document No. J464xA-DoC-A,00.00

### J5457A High-Speed V-Series Interface Module

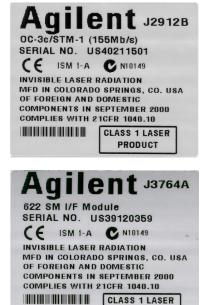
Agilent Tecl	hnologies Ad	DECLARATION ccording to ISO/IEC Guide			CE
Manufacturer's	s Name:	Agilent Technologies,	, Inc.		
Manufacturer's	s Address:	Network Systems Te. 5070 Centennial Bou Colorado Springs, Co United States of Ame	levard blorado 80919	,	
Declares that t	he produc	·t,			
Product Nar Model Numi Product Opi	ber:	High-Speed V-Series J5457A This dealersticp cours			duct
		This declaration cove		n me above pro	JUCI.
Conforms with	the follow	ving European Direc	tives:		
		nplies with the requirements %/EEC (including 93/68/EEC			
Conforms with	the follow	ving product standa	rds:		
EMC	Standar	d		Limit	
	IEC 61000-4-3 IEC 61000-4-4 IEC 61000-4-4 IEC 61000-4-4		5 5 5 6	4kV CD, 8kV AD 3 V/m, 80-1000 N 0.5kV signal lines 0.5 kV line-line, 1 3V, 0.15-80 MHz I cycle, 100%	, 1kV power lines
	Canada: ICES Australia/New	S-001:1998 z Zealand: AS/NZS 2064.1			
		90 + A1:1992 + A2:1995 / E C22.2 No. 1010.1:1992	EN 61010-1:1993	+ A2:1995	
Supplemental [1] The product wa		n: typical configuration with Ag	gilent Technologie	es test systems.	
			Mulf	Nom	
19 February 200 Date	2		Neil Yosinsk Name	<u>ki</u>	
			Regulatory I	Manager	
For further info	rmation, pleas	e contact your local Agilent	t Technologies sa	les office, agent, or	distributor.

#### Laser Safety Statements

Some Advisor interfaces contain Class 1 laser devices. Class 1 laser devices are considered to be safe based upon current medical knowledge.

A laser safety warning label is attached to the individual interface where necessary. Examples of Class 1 warning labels are:





PRODUCT

### Safety Information for Laser Source Modules

Parameter		Specificati	on
Laser Type	Vertical Cavity Surface Emitting laser (VCSEL)		
Laser Class -			
21CFR 1040.10 (Canada, Japan, USA)	Class 1		
IEC825 (Europe)	Class 1		
Transmitter	Min.	Typical	Max.
Avg. Optical Power (dBm)	-10.0	-7.5	-4.0
Optical Wavelength (nm)	830	845	860
Receiver	Min.	Typical	Max.
Optical Sensitivity (dBm)	•	-19.0	-17.0
Peak Input Power (dBm)	•	•	0
Optical Wavelength (nm)	770	•	860

#### Class 1 Laser Product: J2901A

#### WARNING

You must return modules with malfunctioning lasers to an Agilent Technologies Service Center for repair and calibration.

Under no circumstances look into the module connector or the end of an optical cable attached to the optical output when the device is operational.

Parameter	Specification		
Laser Type	FP-Laser InGaAsP		
Laser Class -			
21CFR 1040.10 (Canada, Japan, USA)	Class 1		
IEC825 (Europe)	Class 1		
Transmitter	Min.	Typical	Max.
Avg. Optical Power (dBm)	-12.0	-10.0	-5.0
Optical Wavelength (nm)	1260	1310	1360
		I	
Receiver	Min.	Typical	Max.
Optical Sensitivity (dBm)	-28.0	-32.0	•
Peak Input Power (dBm)	•	•	-3.0
Optical Wavelength (nm)	1240	•	1650

#### Class 1 Laser Products: J2912A, J2912B

#### WARNING

You must return modules with malfunctioning lasers to an Agilent Technologies Service Center for repair and calibration.

Under no circumstances look into the module connector or the end of an optical cable attached to the optical output when the device is operational.

#### Class 1 Laser Product: J3764A (Interface Module for J3763A)

Parameter	Specification			
Laser Type	Fabry-Perot Laser			
Laser Class -				
21CFR 1040.10 (Canada, Japan, USA)	Class 1			
IEC825-1 (Europe)	Class 1			
Transmitter	Min.	Typical	Max	
Avg. Optical Power (dBm)	-15	-13	-8	
Optical Wavelength (nm)	1293	1310	1334	
Receiver	Min.	Typical	Max	
Optical Sensitivity (dBm)	-28	-30	•	
Peak Input Power (dBm)	•	•	-3	
Optical Wavelength (nm)	1200	•	1550	

#### WARNING

You must return modules with malfunctioning lasers to an Agilent Technologies Service Center for repair and calibration.

Under no circumstances look into the module connector or the end of an optical cable attached to the optical output when the device is operational.

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