User's Guide

DCS 302

Intermec

A **UNOVA** Company

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Before You Begin

This section introduces you to standard warranty provisions, safety precautions, warnings and cautions, document formatting conventions, and sources of additional product information. A documentation roadmap is also provided to guide you in finding the appropriate information.

Warranty Information

To receive a copy of the standard warranty provision for this product, contact your local Intermec support services organization. In the U.S. call 1.800.755.5505, and in Canada call 1.800.688.7043. If you live outside of the U.S. or Canada, you can find your local Intermec support services organization on the Intermec Web site at www.intermec.com.

Safety Summary

Your safety is extremely important. Read and follow all warnings and cautions in this book before handling and operating Intermec equipment. You can be seriously injured, and equipment and data can be damaged if you do not follow the safety warnings and cautions.

Do not repair or adjust alone   Do not repair or adjust energized equipment alone under any circumstances. Someone capable of providing first aid must always be present for your safety.

First aid   Always obtain first aid or medical attention immediately after an injury. Never neglect an injury, no matter how slight it seems.

Resuscitation   Begin resuscitation immediately if someone is injured and stops breathing. Any delay could result in death. To work on or near high voltage, you should be familiar with approved industrial first aid methods.

Energized equipment   Never work on energized equipment unless authorized by a responsible authority. Energized electrical equipment is dangerous. Electrical shock from energized equipment can cause death. If you must perform authorized emergency work on energized equipment, be sure that you comply strictly with approved safety regulations.

Warnings, Cautions, and Notes

The warnings, cautions, and notes in this manual use this format.

Warning
A warning alerts you of an operating procedure, practice, condition, or statement that must be strictly observed to avoid death or serious injury to the persons working on the equipment.

Avertissement
Un avertissement vous avertit d'une procédure de fonctionnement, d'une méthode, d'un état ou d'un rapport qui doit être strictement respecté pour éviter l'occurrence de mort ou de blessures graves aux personnes manupulant l'équipement.

Caution
A caution alerts you to an operating procedure, practice, condition, or statement that must be strictly observed to prevent equipment damage or destruction, or corruption or loss of data.

Conseil
Une précaution vous avertit d'une procédure de fonctionnement, d'une méthode, d'un état ou d'un rapport qui doit être strictement respecté pour empêcher l'endommagement ou la destruction de l'équipement, ou l'altération ou la perte de données.

Note: Notes are statements that either provide extra information about a topic or contain special instructions for handling a particular condition or set of circumstances.
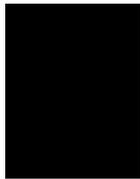
About This Manual

This manual contains all of the information necessary to install and troubleshoot the DCS 302. Many of the detailed procedures and field information that you need are provided in the online help.

This manual was written for users who want to know more about the DCS 302. It was also written for installers, applications analysts, systems engineers, and programmers who will install, operate, program, and troubleshoot the DCS 302 in a network. A basic understanding of data communications and networks is necessary.

What You Will Find in This Manual

This table summarizes the information in each chapter of this manual:

For Information On	Refer To
How the DCS 302 works	Chapter 1, "Installing the DCS 302." Tells you about the DCS 302 and how it fits into your network. Explains how to get help.
Installing the DCS 302	Chapter 1, "Installing the DCS 302." Tells you how to install the DCS 302 in your data collection network.
Configuring the DCS 302	Chapter 2, "Configuring the DCS 302." Provides an overview of how to configure the DCS 302. Detailed procedures and context-sensitive field information are provided in the online help.
Troubleshooting the DCS 302	Chapter 3, "Troubleshooting and Managing the DCS 302." Provides general troubleshooting information, describes the error log, and describes the Product Support Web page.
Managing the DCS 302	Chapter 3, "Troubleshooting and Managing the DCS 302." Explains how to shut down, reboot, and upgrade the DCS 302. It also explains how to back up and restore the files on the DCS 302.
Specifications	Appendix A, "Specifications." Provides the specifications for the DCS 302.

Terminology

You should be aware of how these terms are being used in this manual:

Term	Description
DCS 302	Data Collection Server 302.
Telnet host	Any Unix, IBM, or other IP host that supports Telnet applications.
Device	Any data collection device that communicates through an access point or through the Ethernet network to the DCS 302, such as the T2455.
UDP Plus device	Any data collection device that communicates using UDP Plus, such as the 2415.
WTP device	Any data collection device that communicates using WTP, such as the 6400.
Trakker Antares terminal	Any terminal in the Trakker Antares family of terminals that is communicating using any protocol.
JANUS device	Any device in the JANUS family of devices that is communicating using any protocol.

Format Conventions for Input From a Keyboard or Keypad

This table describes the formatting conventions for input from PC or host computer keyboards and device keypads:

Convention	Description
`Special` text	Shows the command as you should enter it into the device. See "Format Conventions for Commands" later in this chapter.
Italic text	Indicates that you must replace the parameter with a value. See "Format Conventions for Commands" later in this chapter.
Bold text	Indicates the keys you must press on a PC or host computer keyboard. For example, "press **Enter**" means you press the key labeled "Enter" on the PC or host computer keyboard.
$\boxed{enter \leftarrow}$	Shows the key you must press on the device. For example, "press $\boxed{enter \leftarrow}$" directs you to press the key labeled "Enter" on the device keypad.
$\boxed{-f}\,\mathcal{C}\,\boxed{2}\,\boxed{4}\,\boxed{8}$	Shows a series of device keys that you must press and release in the order shown. For example, "Press $\boxed{-f}\,\mathcal{C}\,\boxed{2}\,\boxed{4}\,\boxed{8}$ to access the TRAKKER Antares 2400 Menu System."
$\triangle_{Ctrl}\text{-}\boxed{P}$	Shows a series of device keys that you must press and hold in the order shown. For example, "Press $\triangle_{Ctrl}\text{-}\boxed{P}$ to start communications with the DCS 302."

Format Conventions for Bar Codes

You can scan the bar codes listed in this manual to enter data or perform a command. The bar code labels in this manual are printed in the Code 39 symbology. Each bar code includes the name and human-readable interpretation. For example:

Change Configuration ———— Name

$+ ————————— Bar code (Code 39)
  ————————— Human-readable
                interpretation

0302U006.eps
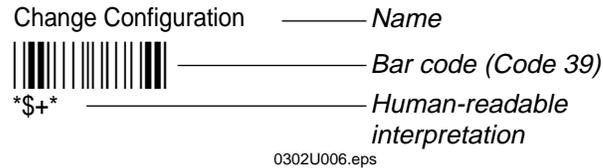
The asterisks (*) at the beginning and end of the human-readable interpretation are the start and stop codes for a Code 39 bar code label. If you are creating bar code labels with a bar code utility, it may automatically supply the asterisks as the start and stop code, so that you only need to type the actual text of the command. You can also create and print configuration labels and reader command labels in Code 93, which has its own start and stop codes.

Format Conventions for Commands

This manual includes sample commands that are shown exactly as you should type them on your device. The manual also describes the syntax for many commands, defining each parameter in the command. This example illustrates the format conventions used for commands:

From the command line, type:

`ping n.n.n.n`

where *n.n.n.n* is the DCS 302 IP address.

This table defines the conventions used in this manual:

Convention	Description
`Special` font	Commands appear in this font. You enter the command exactly as it is shown.
Italic text	Italics indicate a variable, which you must replace with a real value, such as a number, filename, or keyword.
[ ]	Brackets enclose a parameter that you may omit from the command. Do not include the brackets in the command.
Required parameters	If a parameter is not enclosed in brackets [ ], the parameter is required. You **must** include the parameter in the command; otherwise, the command will not execute correctly.
where	This word introduces a list of the command's parameters and explains the values you can specify for them.

Other Intermec Manuals

You may need additional information when working with the DCS 302 in a data collection system. Please visit our Web site at www.intermec.com to download many of our current manuals in PDF format. To order printed versions of the Intermec manuals, contact your local Intermec representative or distributor.

1

Installing the DCS 302

This chapter describes how the Data Collection Server 302 (DCS 302) works, how to install it, how to assign it an IP address, and how to open the home page.

Chapter Checklist

Done?	Task	Page
❑	Understand the features of your DCS 302.	1-4
❑	Unpack the DCS 302.	1-4
❑	Identify the components on the front and rear panels.	1-5
❑	Plug in the power cord.	1-7
❑	Connect to the Ethernet network.	1-8
❑	Assign the DCS 302 an IP address.	1-9
❑	Open the DCS 302 home page.	1-12
❑	Understand how to get help.	1-14

If you already understand and have performed these tasks, proceed to Chapter 2, "Configuring the DCS 302."

What Is the Data Collection Server 302?

The Data Collection Server 302 (DCS 302) lets data collection devices (UDP Plus, WTP) that are running Telnet terminal emulation clients (VTXXX/ANSI, TN5250, TN3270) send information to and receive data from IP hosts that support Telnet applications and are connected to the Ethernet network.

Note: The DCS 302 supports most Intermec Telnet clients, Norand terminal emulation clients (in Telnet mode), and the new TE 2000™ terminal emulation application clients (in Telnet mode).

The DCS 302 does not support Intermec 900 MHz clients, 900 MHz SST clients, 400 MHz S-UHF clients, and CrossBar™ clients.

After you assign an IP address to the DCS 302, you can configure and manage the DCS 302 through a Web browser that is running on a Windows®-based PC that is connected to the same Ethernet network.

Unpacking the DCS 302

1. Set the DCS 302 box on a clean, stable, flat surface and remove the accessories, packing material, and the DCS 302 from the shipping container.

2. Verify the contents of the shipping container against the list below. If any parts are missing, contact your local Intermec representative.

   - DCS 302

   - U.S. power cord, 100-120 VAC

   - *DCS 300 Manual Supplement*

   - *DCS 302 User's Guide*

3. Report any damage or defects. Intermec thoroughly tested and inspected the server before it was shipped to you. If any items are damaged, please take the following steps to correct the problem.

   - Take photographs, if necessary.

   - Contact the transport carrier.

   - Return the DCS 302 package to Intermec.

Understanding the Front Panel
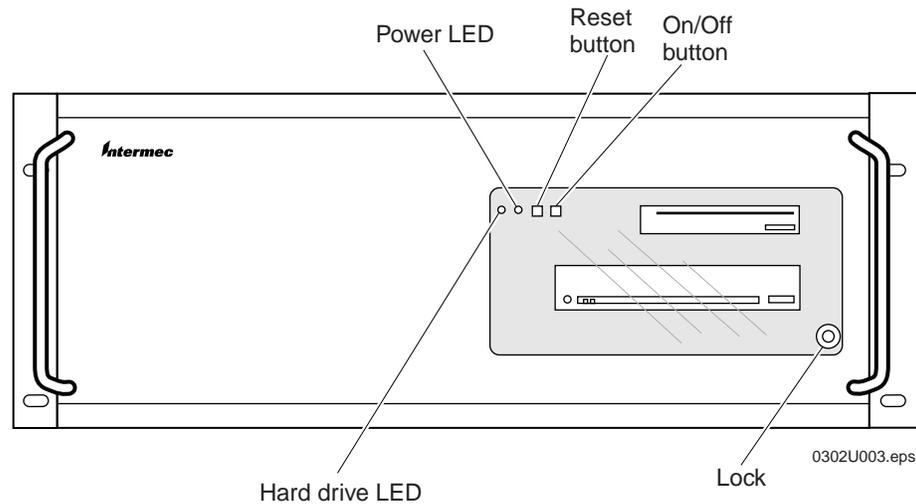
Component	Description
Hard drive LED	Lights when data is being read from or written to the hard disk drive.
Power LED	Lights when the power is on.
Reset button	Reboots the DCS 302. See caution below.
On/Off button	Turns the power on and off. See caution below.
Lock	Locks the front panel to prevent unauthorized access to the Reset button, the On/Off button, the disk drive, and the CD-ROM drive.

Caution
Always shut down the DCS 302 before turning it off. If you do not shut down the DCS 302 properly, you may damage files or lose data.

Conseil
Il faut toujours arrêter le DCS 302 avant de l'éteindre. Si vous n'arrêtez pas le DCS 302 correctement, vous risquez d'endommager des fichiers ou de perdre des données.

Understanding the Rear Panel

Fan

AC in   COM1

0302U004.eps
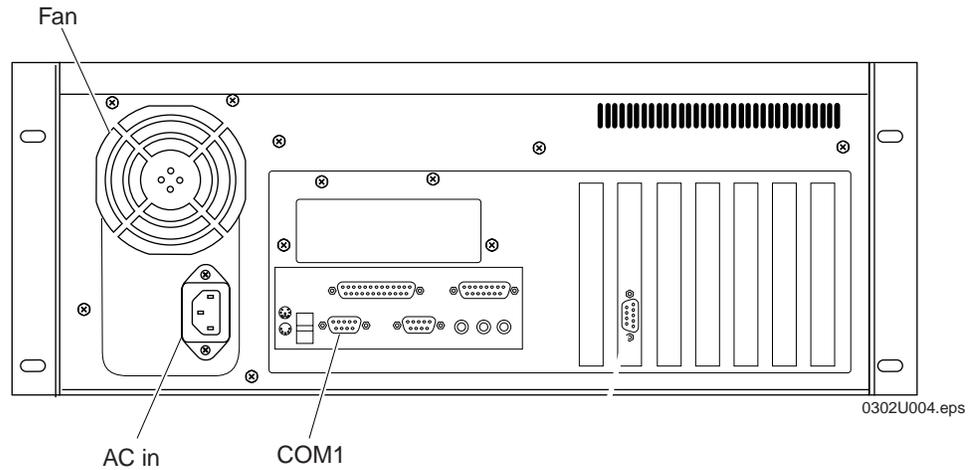
Component	Description
Fan	Prevents your DCS 302 from overheating. When situating your DCS 302, do not place it where the fan is obstructed.
AC in	Connects to one end of the AC power cord that provides power to the DCS 302.
COM1	Not used.

Plugging In the Power Cord

You need to attach the power cord before you can run the DCS 302. However, you may want to plug the power cord into a surge protector or an uninterruptable power supply (UPS). Intermec requires that you use a surge protector in locations that use 115 VAC.

Intermec recommends that you use a UPS in locations that have wide variations in AC power. In case of a power failure, the UPS provides enough backup power to allow you to properly shut down the DCS 302 and minimize the loss of data.

Equipment Needed

- Power cord, 110V U.S. cord (standard)

   Or,

   Power cord, 220-250 VAC for UK (Part No. 586266)
   Power cord, 220-250 VAC for Europe (Part No. 586267)

- Surge protector

   Or,

   Uninterruptable power supply, North America (Part No. 589082)
   Uninterruptable power supply, International (Part No. 589079)

To connect the power cord

1. Locate the AC in port on the rear panel of the DCS 302.

2. Insert the DCS 302 power cord 3-pin connector into the AC in port.

3. Plug the other end of the power cord into an AC power outlet, a surge protector, or a UPS.

Connecting to the Ethernet Network

The DCS 302 contains one 10/100 Mbps Ethernet card. To connect the DCS 302 to an Ethernet network, you must physically attach it to the wired network, assign it an IP address, access the DCS 302 home page, and configure the TCP/IP parameters by using DHCP or by manually entering them.

Installing the DCS 302

Equipment Needed

*   An Ethernet connection where you can connect the DCS 302.

*   An Ethernet cable that meets the requirements of your Ethernet network, such as an Ethernet CAT5 cable.

10/100 Mbps
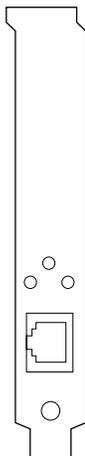
0302U020.eps

To install the DCS 302

1. Locate the slot that contains the Ethernet card(s) on the rear panel of your DCS 302. Refer to the figure on the left.

2. Insert one end of the cable into the Ethernet port on the card and the other end into the Ethernet connection.

Assigning the DCS 302 an IP Address

Caution
You can only perform this procedure the first time you configure the Ethernet card. Make sure that you type in the correct MAC address and a valid IP address or you will not be able to access your DCS 302.

Conseil
Vous pouvez seulement exécuter cette procédure la première fois que vous configurez la carte Ethernet. Assurez-vous de saisir correctement l'adresse MAC et une adresse IP valide, sinon vous ne pourrez pas accéder à votre DCS 302.

Note: If you want to change the IP address, you can use a Web browser that is installed on a Windows-based PC.

Before you begin configuring the DCS 302, you need the following information and network privileges:

Information or Privilege	Description
System privileges	You need root privileges on your UNIX system or administrator privileges on a Windows NT server.
Ethernet address	You need to know the MAC address of your Ethernet card. The MAC address of your card is located on a label on the rear panel of the DCS 302.
IP address	You must obtain an unused IP address from your network administrator. After you access the DCS 302 home page for the first time, you can configure the DCS 302 to use DHCP.

You set the IP address of the DCS 302 by using ARP (address resolution protocol), which is available in Windows 95, Windows 98, Windows NT, Windows 2000, UNIX, and Linux. ARP provides an easy way to download IP addresses to individual cards. You cannot use this method over routers.

Using ARP in Windows 95

1. Start a DOS® window.

2. Type the following command:

    ```
    arp -a
    ```

3. Verify that there are ARP entries in the table. If there are entries go to Step 5.

4. Ping a device in your network by typing:

    ```
    ping n.n.n.n
    ```

    where *n.n.n.n* is the IP address for a device. This command puts an ARP entry in the table.

5. Type the following command:

    ```
    arp -s n.n.n.n nn-nn-nn-nn-nn-nn

    ping n.n.n.n

    arp -d n.n.n.n
    ```

    where:

    n.n.n.n   is the IP address for the DCS 302.

    nn-nn-nn-nn-nn-nn   is the MAC address for the Ethernet card.

Example
```
arp -s 192.168.3.191 00-40-8c-10-00-86

ping 192.168.3.191
```

The host returns `Reply from 192.168.3.191 ...` or a similar message. This reply indicates that the address has been set and communications established. Type `arp -d 192.168.3.191` to delete this ARP entry from the translation table.

Using ARP in Windows 98, NT, or 2000

1. Start a DOS® window.

2. Type the following command:

    ```
    arp -s n.n.n.n nn-nn-nn-nn-nn-nn

    ping n.n.n.n

    arp -d n.n.n.n
    ```

    where:

    n.n.n.n   is the IP address for the DCS 302.

    nn-nn-nn-nn-nn-nn   is the MAC address for the Ethernet card.

Example

```
arp -s 192.168.3.191 00-40-8c-10-00-86

ping 192.168.3.191
```

The host returns `Reply from 192.168.3.191 ...` or a similar message. This reply indicates that the address has been set and communications established. Type `arp -d 192.168.3.191` to delete this ARP entry from the translation table.

Using ARP in UNIX or Linux

*   Type the following command:

    ```
    arp -s host_name nn:nn:nn:nn:nn:nn temp

    ping host_name
    ```

    where:

    host_name   is the local host name that is mapped to the IP address.

    nn:nn:nn:nn:nn:nn   is the MAC address for the Ethernet card.

Example

```
arp -s npsname 00:40:8c:10:00:86 temp

ping npsname
```

The host will return `npsname is alive` or a similar message. This message indicates that the address has been set and communications established. When you execute the ping command for the first time, you may experience a longer response time.

The ARP command can vary between different UNIX systems. Berkeley System Distribution (BSD) type systems expect the host name and node address in reverse order. IBM AIX® systems require the additional argument ether. For example:

```
arp -s ether hostname 00:40:8c:10:00:86 temp
```

Opening the DCS 302 Home Page

From the DCS 302 home page, you can configure, manage, and troubleshoot your DCS 302.

To open the DCS 302 home page

Note: If you access the Internet by using a proxy server, you MUST add the IP address of the DCS 302 to your Exceptions list. The Exceptions list contains the addresses that you do not want to use with a proxy server.

1. Start a Web browser on your PC.

2. In the Address field (Internet Explorer 5.0) or the Location field (Netscape Communicator 4.7), type:

    `http://dcs302ip`

    where *dcs302ip* is the DCS 302 IP address.

3. Press **Enter**. The DCS 302 home page appears.
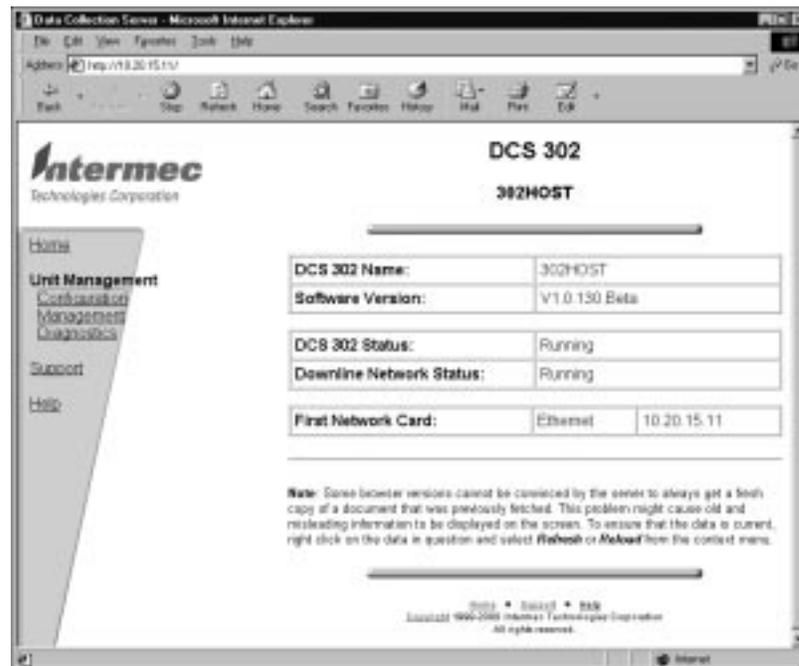
Across the top of the window is the Web browser menu, which includes a File menu and an Edit menu. Below this menu are the Web browser buttons, such as Back and Home. On the left side of the window is a navigation menu with these links:

Home   Choose this link to return to the DCS 302 home page.

Configuration   Choose this link to configure the DCS 302.

Management   Choose this link to access a Web page that lets you reboot, shut down, back up files, restore files, and upgrade the DCS 302. From this Web page, you can also start or stop the downline network. For help, see Chapter 3, "Troubleshooting and Managing the DCS 302."

Diagnostics   Choose this link to troubleshoot the DCS 302. From this Web page, you can view the error log. For help, see Chapter 3, "Troubleshooting and Managing the DCS 302."

Support   Choose this link to get information from Intermec Product Support. For help, see "Using the Product Support Page" in Chapter 3.

Help   Choose this link to access the procedural online help. For help, see "Getting Help" later in this chapter.

Getting Help

If you need help installing, configuring, managing, or troubleshooting the DCS 302, you can use this user's guide and the online help. From the home page, you can also click Support to access the Product Support page.

User's Guide   This user's guide provides some introductory information about the DCS 302 and explains how to install it. It also provides an overview of how to configure the DCS 302, manage it, and troubleshoot it.

Procedural Help   If you need to know how to configure the DCS 302, click Help from the DCS 302 home page. The Welcome page appears. To the left of the Welcome page are the Contents, Index, and Search tabs. Choose the Contents tab to display the "books" or topics that are available. Click the books to display pages that contain procedures on how to configure, run, maintain, or troubleshoot the DCS 302.

Note: Choose the Index tab or the Search tab to look for information on a specific topic or keyword.

Context-Sensitive Help   If you need to know what to enter into a field, place your cursor on the field. In the lower right side of the page, you see a short definition, the values or range of values for the field, and the default value.

You can get procedural help on configuring the DCS 302 by clicking Help in the lower left side of the page underneath the configuration menu tree.
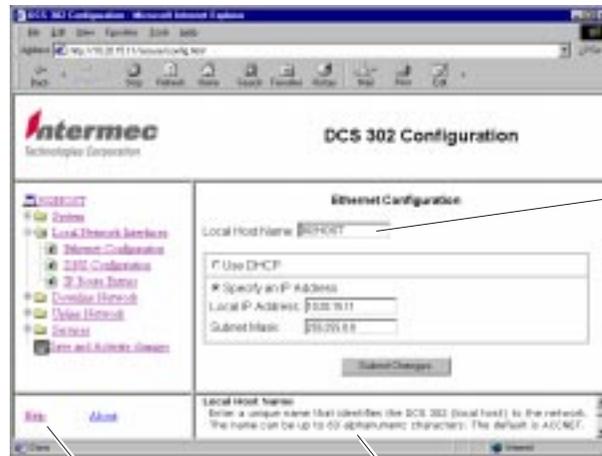
Place cursor
in the field

Click help for
procedural help

Context-sensitive
help appears
for the field

0302U008.eps

Product Support   The Product Support page provides FAQs, fax document retrieval services, telephone numbers, an e-mail address, and a fax number. It also provides a case form that you can fill out and send to Product Support via e-mail or fax. For help, see "Using the Product Support Page" in Chapter 3.

2

Configuring the DCS 302

This chapter provides guidelines on how to configure your DCS 302.

Chapter Checklist

Done?	Task	Page
❑	Set the system time and date.	2-4
❑	Configure the Ethernet network.	2-5
❑	Connect to and configure the IP host.	2-6
❑	Configure and start the data collection network.	2-6
❑	Configure the data collection devices.	2-8
❑	(Optional) Configure the devices to use the auto fallback feature.	2-9
❑	Run the TE application.	2-11

Note: To configure the DCS 302, you must use a Web browser that is installed on a Windows-based PC.

If you have performed these tasks, you are ready to run your TE application. For help troubleshooting or managing the DCS 302, see Chapter 3 "Troubleshooting and Managing the DCS 302."

Setting the System Date and Time

You may need to set the current date and time on the DCS 302. This section provides an overview for setting the date and time on the DCS 302. For detailed instructions, see the online help.

Note: When you click Configuration, a security screen may appear. In the User Name field, type INTERMEC and in the Password field, type INTERMEC. Choose OK.

In the configuration menu tree, expand the System submenu. Click Date and Time. The Change Date and Time page appears. The DCS clock is the date and time that is set on the DCS 302; the local browser clock is the date and time that is set on your PC.

If you need to change the date and time on the DCS 302, you can either manually type in the date or you can click the Popup Calendar icon to select a date from a calendar. You may also need to type in the time.

Configuring the Ethernet Network

After you physically connect the DCS 302 to the Ethernet network, you need to configure it. This section provides an overview for configuring the Ethernet network. For detailed instructions, see the online help.

Note: When you click Configuration, a security screen may appear. In the User Name field, type `INTERMEC` and in the Password field, type `INTERMEC`. Choose OK.

In the configuration menu tree, expand the Local Network Interfaces submenu. Three choices appear: Ethernet Configuration, DNS Configuration, and IP Route Entries. You obtain most of the values for these parameters from your network administrator.

To configure the Ethernet network

* Use DHCP. You may also want to set the DNS server IP addresses and the domain.

  Or,

  Specify an IP address. You must set the DCS 302 IP address and the subnet mask.

You may also need to create default and static routing tables so that the DCS 302 knows how to reach other networks and subnets than those that are directly connected to it. For help, see the online help.

Click Save and activate changes. For more help, see the online help.

Connecting to the IP Host

The DCS 302 communicates to the IP hosts through the Ethernet network. To connect the DCS 302 to the IP host, you must first connect it to the Ethernet network. This section provides an overview for configuring the IP host. For detailed instructions, see the online help.

Note: When you click Configuration, a security screen may appear. In the User Name field, type INTERMEC and in the Password field, type INTERMEC. Choose OK.

In the configuration menu tree, expand the Upline Network submenu. Click IP Hosts to configure the parameters for the IP hosts and their ports.

Click Save and activate changes. For more help, see the online help.

Connecting to the Downline Network

The DCS 302 communicates to the downline network (data collection devices) through the Ethernet network. Before you configure the DCS 302, verify that the access points are correctly installed and configured and that your devices are communicating with the access points.

To connect the DCS 302 to the downline network

1. Connect the DCS 302 to the Ethernet network. For help, see "Configuring the Ethernet Network" earlier in this chapter.

2. Configure the downline network.

3. Start the downline network.

4. Configure the data collection devices.

Each step is explained in the next sections.

Configuring the Downline Network

This section provides an overview for configuring the downline network. For detailed instructions, see the online help.

Note: When you click Configuration, a security screen may appear. In the User Name field, type INTERMEC and in the Password field, type INTERMEC. Choose OK.

In the configuration menu tree, expand the Downline Network submenu. To configure the downline network, you must define parameters for the UDP Plus network and its devices and the WTP network and its devices.

Click Save and activate changes. For more help, see the online help.

Starting the Downline Network

You must start the downline network before you can perform any data collection.

To start the downline network

• From the DCS 302 home page, click Management. The DCS 302 Management page appears. Click the Start button after Downline Network. A message box appears confirming that the downline network has been started.

Or,

From the DCS 302 home page, click Configuration. The DCS 302 Configuration page appears. Click Services and Startup and then check the Downline Network check box. Each time you reboot the DCS 302, the downline network automatically starts running.

To stop the downline network

1. In the DCS 302 Management Web page, choose Stop. A message box appears confirming that you want to stop the downline network.

2. Choose OK. A message box appears informing you that the downline network has been stopped.

Configuring the Data Collection Devices

The data collection devices can communicate to IP hosts through the DCS 302 if they have a supported Telnet TE client loaded on them. This table identifies the files that must be loaded on each device before the device can run Telnet TE.

Device	Protocol	Application	Files
Trakker Antares terminal (2415, T2425, T2455, T248X)	UDP Plus	VTXXX, ANSI,	TEANT.CFG, VTXXX_D.BIN
		TN5250	TEANT.CFG, POLX5250.MAP, PLX5250.BIN
		TN3270	TEANT.CFG, POLX3270.MAP, PLX3270.BIN
		TE 2000	Pre-loaded
JANUS device (JG2010, JG2020, JG2050)	UDP Plus	VTXXX, ANSI	TE.CFG, UDPVT.EXE
		TN5250	TE.CFG, TE5250.CFG, JAN5250.MAP, UDP5250.EXE
		TN3270	TE.CFG, TE3270.CFG, JAN3270.MAP, UDP3270.EXE
1100, 1700, 5055, 5900, 6400	WTP	VT220 TN5250 TN3270	Pre-loaded

To configure the data collection devices

1. Verify that each device is configured to communicate with access points and the DCS 302.

2. Verify the TE client files are loaded. If they are not loaded, load the files.

3. Verify that each device's upline protocol is configured for Telnet.

For help, see your device's user's manual.

Using the Auto Fallback Feature

The Auto Fallback feature lets Trakker Antares UDP Plus terminals and WTP devices switch from a DCS 302 that goes offline to another DCS 302 that is online with minimal system disruption. JANUS UDP Plus devices do not support this feature.

When Trakker Antares UDP Plus terminals are communicating with access points and the DCS 302, the Connect icon is on. If the Connect icon blinks, the terminal is no longer communicating with the DCS 302.

Note: If your Connect icon blinks or turns off, you may be out of range of an access point, you may be about to go out of range of an access point, or the access point may have recently been turned off. Verify that you do not have an access point problem before you try to obtain a new controller IP address.

If you have implemented the Auto Fallback feature in your data collection network, simply press ⓘ/◎ twice on your terminal to obtain the other DCS 302's IP address. When the Connect icon turns back on, you can continue data collection.

When WTP devices are no longer communicating with the DCS 302, you can no longer perform data collection. If you have implemented the Auto Fallback feature in your data collection network, reboot the device. The terminal session will try to connect to Host A. If it cannot connect to Host A, it tries to connect to Host B and then to Host C. When it makes a connection, you can continue data collection.

Configuring the DCS 302s

You must configure each DCS 302 that you want to be available to use with the Auto Fallback feature. Except for the Ethernet network parameters, each DCS 302 should be configured the same. Also, each DCS 302 must accept connections from the device or devices that you want to use with this feature.

Configuring the Trakker Antares UDP Plus Terminals

The Trakker Antares UDP Plus terminals must be running firmware version 3.21 or later.

To configure the terminals to use the Auto Fallback feature

1. Configure the network parameters for the terminal, including the terminal IP address and the controller IP Address. The controller IP address can be any valid IP address. For help, see your terminal user's manual.

2. Scan this bar code:

    Enable DHCP

    ||||||||||||||||||||||||||||||||||||||||

    $+NI1

3. Press Ⓘ/O twice.

The terminal looks for a DCS 302 on the network. When it locates a DCS 302, it resets its controller IP address parameter to the IP address of the DCS 302 that it found.

Note: If the terminals are in a different subnetwork than the DCS 302, you must configure and enable the DHCP relay agent on the routers. For help, see your router user's manual.

Configuring the WTP Devices

The WTP devices must be running firmware version 5.33 or later. You must configure the network parameters for the device, including Host A, Host B, and Host C. For each of these hosts, you define the communications mode, the terminal number, and the RF host stack. The RF host is the DCS 302 to which you want the device to connect. When a device is booted, the terminal session tries to connect with Host A. If it cannot connect to Host A, it tries to connect to Host B and then to Host C.

Running Your TE Application

To run the TE application you need to start the downline network and the TE clients (Trakker Antares UDP Plus terminals, JANUS UDP Plus devices, and WTP devices).

To run the Telnet application

1. Make sure that you have configured the data collection devices.

2. Open the DCS 302 home page. For help, see "Opening the DCS 302 Home Page" in Chapter 1.

3. Start the downline network. For help, see "Starting the Downline Network" earlier in this chapter.

4. Turn on your devices and start your application.

Trakker Antares UDP Plus Terminals

To run the TE 2000 terminal emulation application, simply press ⊚ to turn on the Trakker Antares terminal.

To run the legacy Intermec Telnet TE clients on your Trakker Antares terminals, you can either scan one of the bar codes below or you can use the TRAKKER Antares 2400 Menu System.

To run VT/ANSI TE

• Scan this bar code:

Run Program C:VTXXX_D.BIN

//C:VTXXX_D.BIN

To run TN5250 TE

• Scan this bar code:

Run Program C:PLX5250.BIN

//C:PLX5250.BIN

To run TN3270 TE

- Scan this bar code:

Run Program C:PLX3270.BIN

||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

//C:PLX3270.BIN

To use the TRAKKER Antares 2400 Menu System to run TE

1. On your terminal, access the TRAKKER Antares 2400 Menu System by pressing
    ⌐f⌐ ⌐⌐ ⌐T⌐ ⌐2⌐ ⌐M⌐ or ⌐f⌐ ⌐⌐ ⌐2⌐ ⌐4⌐ ⌐8⌐ or by scanning this bar code:

Enter Test and Service Mode

|||||||||||||||||||||||||||||||

..-.

Note: If your terminal has a Left Enter key, you must use that key when entering
the key sequence in Step 1. Otherwise, just use the ⌐enter↵⌐ key.

2. From the Main Menu, choose System Menu and then choose File Manager. The File
    Manager screen appears.

3. Select drive C and press ⌐enter↵⌐. A list of applications that are loaded on your terminal
    appears.

4. Select the TE client and press ⌐enter↵⌐. For help, see this table:

To Run This TE	Choose This Client
VT/ANSI	VTXXX_D.BIN
TN5250	PLX5250.BIN
TN3270	PLX3270.BIN

The TE client starts. The terminal sends a power-up packet that contains an "I" followed
by a 4-byte hex representation of the IP address followed by the terminal type.

JANUS UDP Plus Devices

To run the TE client on your JANUS devices, you can either scan one of the bar codes below or you can type a command at the DOS prompt.

To run VT/ANSI TE

• Scan this bar code:

Run UDPVT

UDPVT

To run TN5250 TE

• Scan these bar codes:

Load the Reader Wedge TSR

RWTSR

Run UDP5250

UDP5250

To run TN3270 TE

• Scan these bar codes:

Load the Reader Wedge TSR

RWTSR

Run UDP3270

UDP3270

To use the DOS prompt to run TE

1. (TN5250 or TN3270) Type RWTSR and press ⏎.

2. Type one of these commands:

To Run This TE	Type
VT/ANSI	UDPVT
TN5250	UDP5250
TN3270	UDP3270

3. Wait a few seconds while the screen clears and the TE client starts. When the screen shows a login screen (VT/ANSI) or a Sign on screen (5250 or 3270), you are ready to use your device.

WTP Devices

The TE client starts when you turn on the device. WTP devices send a power-up packet that contains a 2-byte device number followed by the device type.

3

Troubleshooting and Managing the DCS 302

This chapter describes how to troubleshoot and manage the DCS 302.

General Troubleshooting

Note: You can remotely access the DCS 302 if you have a network modem connected to your Ethernet network. For more information, contact your local Intermec representative.

If you have problems running the DCS 302 in your data collection network, look for your symptom in the table below and then try the solutions in the order that they are listed. If your problem is not listed in the table, you can look at the error log, the diagnostics, or the Product Support page.

Symptom	Solution
You cannot connect to the DCS 302 from your PC, or the DCS 302 pages do not display properly on your PC.	The DCS 302 works best with Internet Explorer 4.0 or higher or Netscape Navigator 4.5 or higher on Windows 95/98/NT/2000.
	If you access the Internet by using a proxy server, make sure that you have added the DCS 302 IP address to your Exceptions list.
From your device, you cannot connect to the Telnet host.	Make sure the DCS 302 is connected to and configured for the Ethernet network. Use a PC that is connected to the Ethernet network to ping the device IP address and the DCS 302 IP address.
	Make sure that the terminal emulation client is running on the device and that the device is communicating with the DCS 302.
	Make sure that the device is communicating with the access point.
	On the device, make sure that it is configured for Telnet. Also, make sure that you have set the controller IP address parameter to the DCS 302 IP address and the network port to 23.
You click Help from the DCS 302 home page and the Contents menu does not display on the left side of the help page.	You may have more than one help page open. Close all help pages and click Help again.
	Use Internet Explorer 5.0 or higher.

General Troubleshooting (continued)

Symptom	Solution
You try to access the online help and nothing appears.	The Java 1.2 plug-in may not be installed. It should automatically download from http://java.sun.com/products/plugin/.
	If you move or rename the Java plug-in directory on your PC, the Java plug-in installation may be corrupted. Reinstall the Java plug-in.
	You may need to configure the Java 1.2 plug-in. Choose Java Plug-in Control Panel from the Start menu on your PC. Choose Proxies to change the proxy configuration options. You may need to uncheck "Use Browser Settings." For help, see the documentation at http://java.sun.com/products/plugin/.
	Use Internet Explorer 5.0 or higher.

About the DCS 302 Error Log

The error log provides a static view of all the status and error messages. If new status or error messages are generated while you are viewing the error log, you will not see them until you refresh the DCS 302 Error Log page.

Error log error messages are divided into the following parts:

* The first line contains the date and time the message was generated and information about the message, including the source that generated it.

  w-xxxx-yyyy

  where:

 *w*   is the subsystem number (the DCS 302 is system 7)

  xxxx   is the module number of the source code

  yyyy   is the specific message number

* The second line contains the specific message.

* There may be other lines that contain arguments pertaining to the error.

To view the error log

1. From the DCS 302 home page, click Diagnostics. The DCS 302 Diagnostic Tools page appears.

2. Click View Error Log. A security screen may appear. If it does not appear, go to Step 4.

3. In the User Name field, type `INTERMEC` and in the Password field, type `INTERMEC`. You must type Intermec in uppercase letters.

4. Choose OK. The DCS 302 Error Log page appears.

DCS 302 Error Log Page
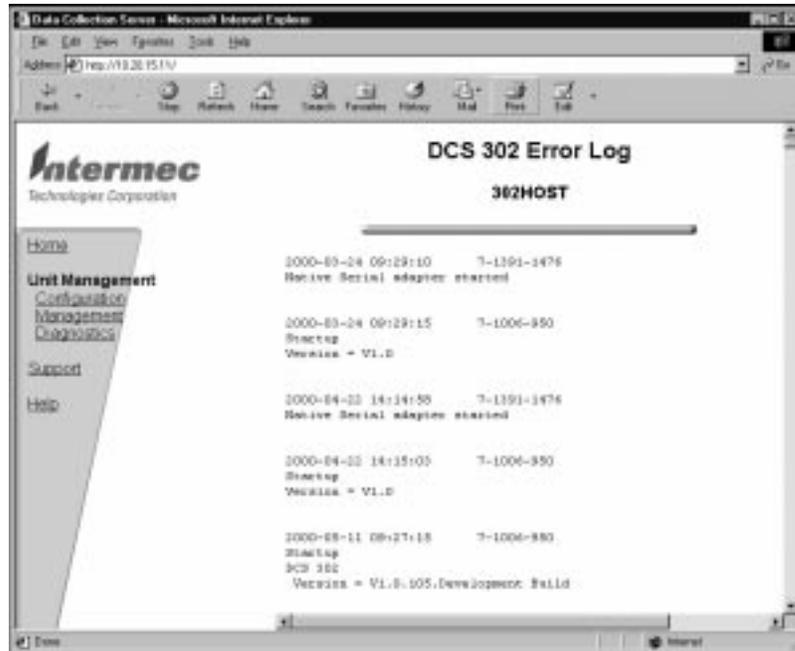
To refresh the DCS 302 Error Log page

- From the Web browser buttons, click Refresh (Internet Explorer 5.0) or Reload (Netscape Communicator 4.7).

Using the Product Support Page

The Product Support page provides information on the different ways you can get help:

• Internet resources that link you to the Product Support home page for the DCS 302 and other Intermec products.

• Fax document retrieval service that lets you access many Intermec documents, frequently asked questions, and other useful literature.

• E-mail address and fax number that let you ask Product Support a specific question using a new case form.

• Telephone number that lets you contact Product Support if you are a U.S. customer. If you are an international customer, click the local support representative link. This link opens a Global Directory Web page where you can locate your local representative.

To access the Product Support page

• From the DCS 302 home page, click Support. The Product Support page appears.
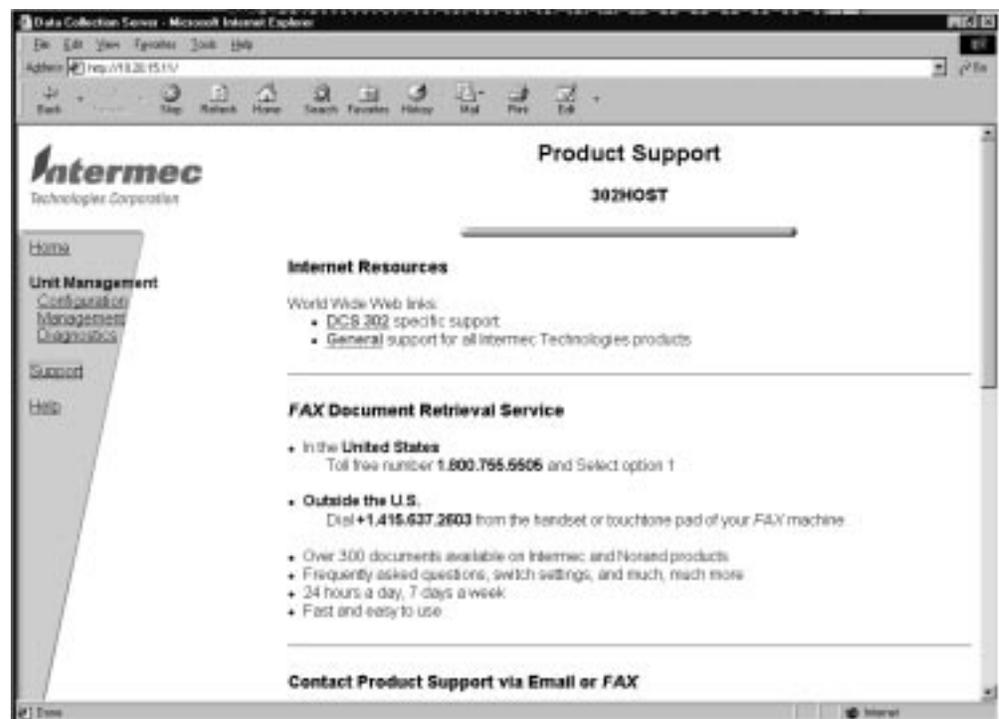
For help filling out the new case form, see the online help.
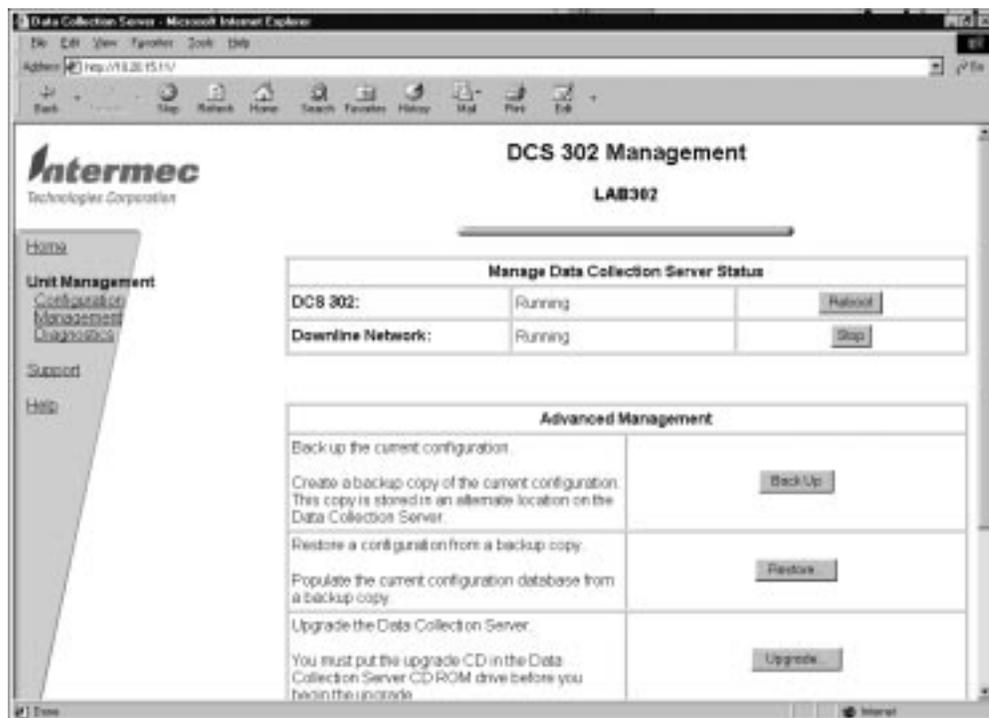
Managing the DCS 302

Note: You can remotely access the DCS 302 if you have a network modem connected to your Ethernet network. For more information, contact your local Intermec representative.

From the DCS 302 Management page, you can:

- Start or stop the downline network. For help, see "Starting the Downline Network" in Chapter 2.

- Reboot the DCS 302. For help, see "Rebooting the DCS 302" in the next section.

- Shut down the DCS 302. For help, see "Shutting Down the DCS 302" later in this chapter.

- Back up the current configuration or restore a previously saved configuration. For help, see the online help.

- Upgrade the DCS 302. For help, see the instruction sheet that ships with the CD. For the price and availability of upgrades, contact your local Intermec representative.

To access the DCS 302 Management page

• From the DCS 302 home page, click Management. The DCS 302 Management page appears.

Rebooting the DCS 302

When you use the DCS 302 Management page to reboot the DCS 302, the DCS 302 performs a series of shutdown activities and then restarts.

To reboot the DCS 302

1. From the DCS 302 home page, click Management. A security screen may appear. If it does not appear, go to Step 3.

2. In the User Name field, type INTERMEC and in the Password field, type INTERMEC. You must type Intermec in uppercase letters. The DCS 302 Management page appears.

3. Choose Reboot. A message box appears confirming that you want to shut down and reboot the DCS 302.

4. Choose OK.

Shutting Down the DCS 302

Caution
Always shut down the DCS 302 before turning it off. If you do not shut down the DCS 302 properly, you may damage files or lose data.

Conseil
Il faut toujours arrêter le DCS 302 avant de l'éteindre. Si vous n'arrêtez pas le DCS 302 correctement, vous risquez d'endommager des fichiers ou de perdre des données.

If you need to turn off the DCS 302 for maintenance or relocation, make sure you use the next procedure. The DCS 302 must perform a series of shutdown activities to ensure that you do not lose any system files or data.

To shut down the DCS 302

1. From the DCS 302 home page, click Management. A security screen may appear. If it does not appear, go to Step 3.

2. In the User Name field, type INTERMEC and in the Password field, type INTERMEC. You must type Intermec in uppercase letters. The DCS 302 Management page appears.

3. Choose Shutdown. A message box appears confirming that you want to shut down the DCS 302.

4. Choose OK. The DCS 302 shuts down. You can now push the On/Off button to turn off the DCS 302.

To turn on the DCS 302

*   Press the power button.

A

Specifications

This appendix provides the specifications for the DCS 302.

Specifications

Physical Specifications
Length: 39.2 cm (15.25 in)

Height: 17.7 cm (6.97 in)

Width: 48.3 cm (19.0 in)

Weight: 12.35 kg (27.2 lb)

Electrical Specifications
100-120 VAC

200-240 VAC

47-63 Hz

250 Watts maximum

North American or International power via autoswitching

Environment Specifications
Operating: 0° to 35°C (32° to 95°F)

Storage: -20° to +60°C (-4° to +140°F)

Humidity: 0 to 85% (non-condensing)

Regulatory Approvals
CE Marked for both EMC and Low Voltage Directives, UL Listed, cUL Listed, TÜV-GS Licensed, NYCE-NOM Certified, C-Tick Marked, FCC-Part 15 Class A, IC-ICES-003 Class A, CISPR 22 Class A