



# ***CiM-25***

## ***Quick Start Guide***

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IP-Enabled M&C  
Part Number CD/CIM25QSG.IOM  
Rev. 0





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Comtech EF Data is an ISO 9001  
Registered Company.



IP Enabled M&C  
Part Number CD/CIM25QSG.IOM  
REV. 0  
March 3, 2004

## CUSTOMER SUPPORT

Contact the Comtech EF Data Customer Support Department for:

- ▶ Product support or training
- ▶ Information on upgrading or returning a product
- ▶ Reporting comments or suggestions concerning manuals

A Customer Support representative may be reached at:

Comtech EF Data  
Attention: Customer Support Department  
2114 West 7th Street  
Tempe, Arizona 85281 USA

480.333.2200 (Main Comtech EF Data Number)  
480.333.4357 (Customer Support Desk)  
480.333.2161 FAX

or, E-Mail can be sent to the Customer Support Department at:

[cimfss@comtechefdata.com](mailto:cimfss@comtechefdata.com)

Contact us via the web at [www.comtechefdata.com](http://www.comtechefdata.com).

1. To return a Comtech EF Data product (in-warranty and out-of-warranty) for repair or replacement:
2. Request a Return Material Authorization (RMA) number from the Comtech EF Data Customer Support Department.
3. Be prepared to supply the Customer Support representative with the model number, serial number, and a description of the problem.
4. To ensure that the product is not damaged during shipping, pack the product in its original shipping carton/packaging.
5. Ship the product back to Comtech EF Data. (Shipping charges should be prepaid.)

For more information regarding the warranty policies, see Warranty Policy, p. vii.

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## ABOUT THIS MANUAL

This manual provides installation and operation information for the Comtech EF Data CiM-25 Quick Start Guide. This is a technical document intended for earth station engineers, technicians, and operators responsible for the operation and maintenance of the CiM-25 Quick Start Guide.

## CONVENTIONS AND REFERENCES

### CAUTIONS AND WARNINGS



Indicates information critical for proper equipment function.



Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury. CAUTION may also be used to indicate other unsafe practices or risks of property damage.



Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.

## METRIC CONVERSION

Metric conversion information is located on the inside back cover of this manual. This information is provided to assist the operator in cross-referencing English to Metric conversions.

## TRADEMARKS

All product names mentioned in this manual may be trademarks or registered trademarks of their respective companies and are hereby acknowledged.

## REPORTING COMMENTS OR SUGGESTIONS CONCERNING THIS MANUAL

Comments and suggestions regarding the content and design of this manual will be appreciated. To submit comments, please contact the Comtech EF Data Customer Support Department.

## **EMC COMPLIANCE**

This is a Class A product. In a domestic environment, it may cause radio interference that requires the user to take adequate protection measures.

## **EN55022 COMPLIANCE**

This equipment meets the radio disturbance characteristic specifications for information technology equipment as defined in EN55022.

## **EN50082-1 COMPLIANCE**

This equipment meets the electromagnetic compatibility/generic immunity standard as defined in EN50082-1.

## **FEDERAL COMMUNICATIONS COMMISSION (FCC)**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference; in which case, users are required to correct the interference at their own expense.

**Note:** To ensure compliance, properly shielded cables for DATA I/O shall be used. More specifically, these cables shall be shielded from end to end, ensuring a continuous shield.

## SAFETY COMPLIANCE


### EN 60950

Applicable testing is routinely performed as a condition of manufacturing on all units to ensure compliance with safety requirements of EN60950.


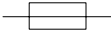
This equipment meets the Safety of Information Technology Equipment specification as defined in EN60950.



### LOW VOLTAGE DIRECTIVE (LVD)

The following information is applicable for the European Low Voltage Directive (EN60950):

<HAR>	Type of power cord required for use in the European Community.
	CAUTION: Double-pole/Neutral Fusing. ACHTUNG: Zweipolige bzw. Neutraleiter-Sicherung.

International Symbols:

Symbol	Definition
	Alternating Current.
	Fuse.

Symbol	Definition
	Protective Earth.
	Chassis Ground.

**Note:** For additional symbols, refer to “Cautions” listed earlier in this preface.



## WARRANTY POLICY

This Comtech EF Data product is warranted against defects in material and workmanship for a period of two years from the date of shipment. During the warranty period, Comtech EF Data will, at its option, repair or replace products that prove to be defective.

For equipment under warranty, the customer is responsible for freight to Comtech EF Data and all related custom, taxes, tariffs, insurance, etc. Comtech EF Data is responsible for the freight charges **only** for return of the equipment from the factory to the customer. Comtech EF Data will return the equipment by the same method (i.e., Air, Express, Surface) as the equipment was sent to Comtech EF Data.

## LIMITATIONS OF WARRANTY

The foregoing warranty shall not apply to defects resulting from improper installation or maintenance, abuse, unauthorized modification, or operation outside of environmental specifications for the product, or, for damages that occur due to improper repackaging of equipment for return to Comtech EF Data.

***No other warranty is expressed or implied. Comtech EF Data specifically disclaims the implied warranties of merchantability and fitness for particular purpose.***

## EXCLUSIVE REMEDIES

The remedies provided herein are the buyer's sole and exclusive remedies. Comtech EF Data shall not be liable for any direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory.

## DISCLAIMER

Comtech EF Data has reviewed this manual thoroughly in order that it will be an easy-to-use guide to your equipment. All statements, technical information, and recommendations in this manual and in any guides or related documents are believed reliable, but the accuracy and completeness thereof are not guaranteed or warranted, and they are not intended to be, nor should they be understood to be, representations or warranties concerning the products described. Further, Comtech EF Data reserves the right to make changes in the specifications of the products described in this manual at any time without notice and without obligation to notify any person of such changes.

If you have any questions regarding the equipment or the information in this manual, please contact the Comtech EF Data Customer Support Department.



# Chapter 1. Quick Start Procedure

## CiM-25 IP-Enabled M&C Interface



Using the CiM-25 may require configuring the modem, network, and changing the Windows setup.

## 1.1 MODEM SETUP

The modem must be set to the remote communications protocol of EIA-232 (RS-232). The settings are as follows:

- ▶ Baud rate: **19200**
- ▶ Data rate: **8-N-1**
- ▶ Remote address: **1** unless preset to **0** (CDM-550 and CDM-600 only)

Refer to the modem Operation Manual for selecting these settings.

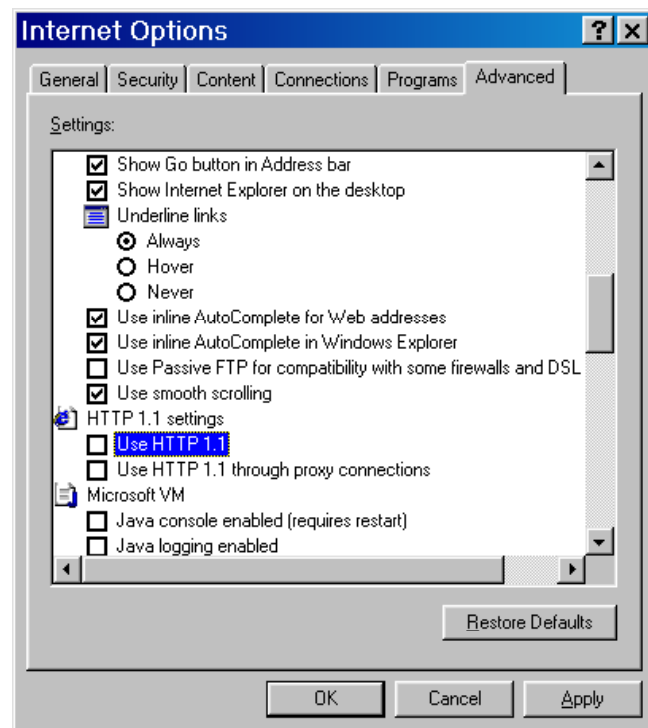
## 1.2 WINDOWS SETUP

### 1.2.1 HTTP 1.1



For best performance, HTTP 1.1 should be disabled. It can be changed as follows:

- 1 Click **Start, Settings**, then **Control Panel**.
- 2 Double-click the **Internet Options** icon in the Control Panel.
- 3 Under the **Advanced** tab, scroll down to **HTTP 1.1 settings**.
- 4 Uncheck the **Use HTTP 1.1** box and click **OK**.

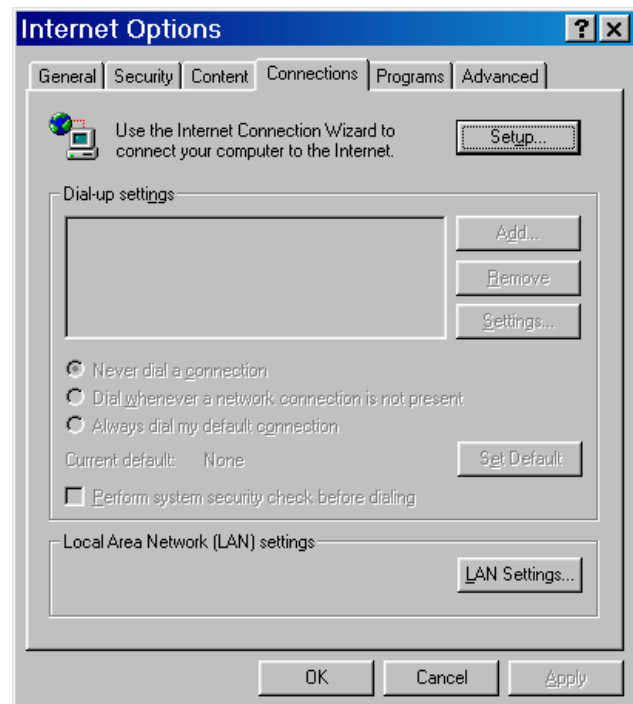


## 1.2.2 PROXY SERVER



If your network uses a proxy server, it may be necessary to disable the use of it for the browser to work. It can be changed as follows:

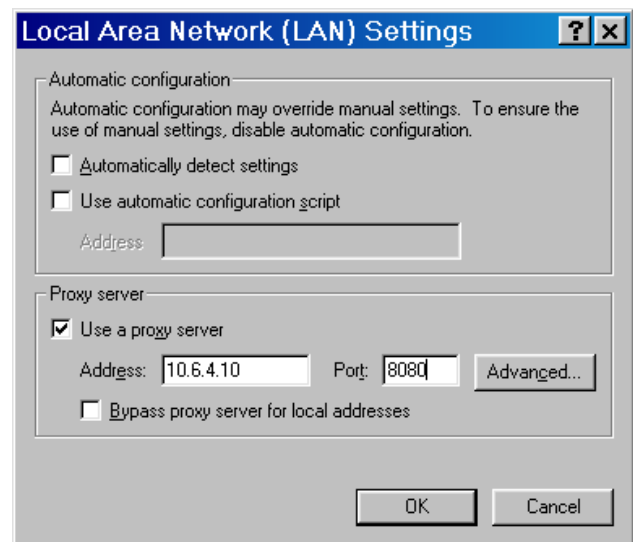
- 1 Click **Start, Settings**, then **Control Panel**.
- 2 Double-click the **Internet Options** icon in the Control Panel.
- 3 Under the **Connections** tab, click the **LAN Settings** button.



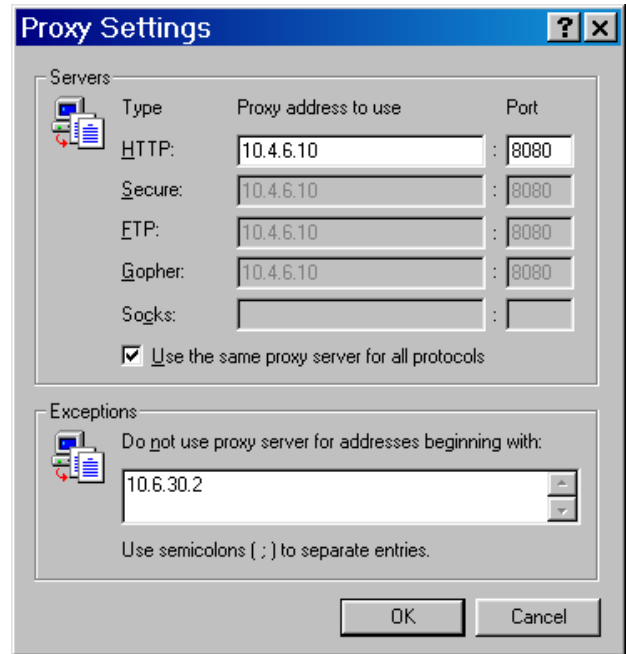
- 4 At this point you must do one of the following:
  - a. Uncheck the **Use a proxy server** box and click **OK**.

or

  - b. Click the **Advanced** button and go to the next step.



- 5 In the **Exceptions** box, enter the IP address of the CiM module and click **OK**.



## 1.3 NETWORK CONFIGURATION

The default network configuration settings are:

- ▶ IP: **10.6.30.1**
- ▶ Admin Name: **admin**
- ▶ Admin Password: **1234**

The CiM-25 has been designed to support a means of allowing a customer to change the IP Address or reset the unit back to the factory default settings. Use the procedure in section 1.3.1 to reset the CiM-25 to factory network defaults. Use the procedure in 1.3.2 to change the CiM-25 network IP Address.

### 1.3.1 RESETTING TO FACTORY DEFAULTS

Perform the following steps:

- 1 Disconnect the CiM-25 from both the interfacing equipment and the Ethernet Network.
- 2 Connect the CiM-25 to the serial port of a PC using a cable defined below (null cable):

CiM-25 pin 2 to PC pin 3  
CiM-25 pin 3 to PC pin 2  
CiM-25 pin 5 to PC pin 5

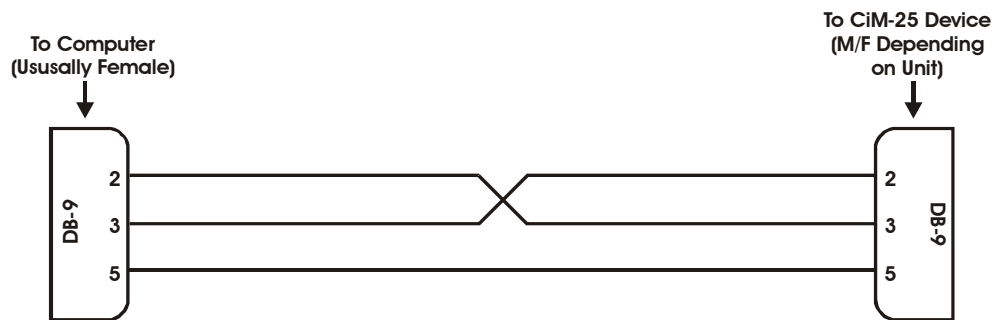


Figure 1. Null Cable Diagram

- 3 Power the CiM-25/300A using the Power Jack connector and a external 5 Vdc power supply.
- 4 Using a Serial Communication application such as Terminal, ProComm, etc., configure the PC's serial port to:

Baud: **19200**  
Data rate: **8-N-1**

5. To reset the CiM-25, enter the following command:

Command: **<0/RST='cr'**

Response: **>0/RST=**

## 1.3.2 CHANGING NETWORK IP ADDRESS

Perform the following steps.

- 1 Do steps 1 – 4 of the above procedure.
- 2 Enter the following command:

Command: **<0/IPA=xxx.xxx.xxx.xxx/yy'cr'**

Where x is the IP Address and y is the subnet mask.

Response: **>0/IPA=**

Example: **<0/IPA=192.168.001.002/16'cr'**

16 would be a subnet mask of 255.255.0.0

- 3 To query the IP address enter: **<0/IPA?'cr'**



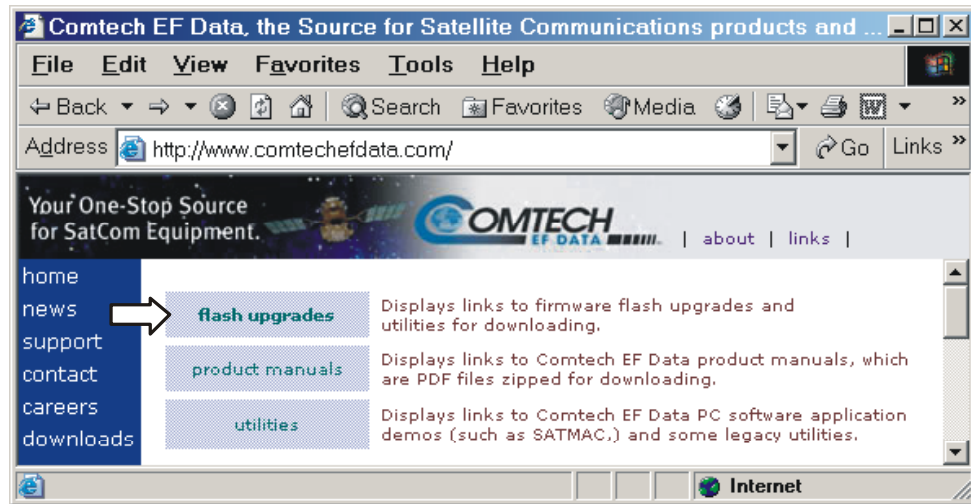
## 1.4 FLASH UPGRADING FOR CiM-25

Perform the following steps to flash upgrade the CiM-25

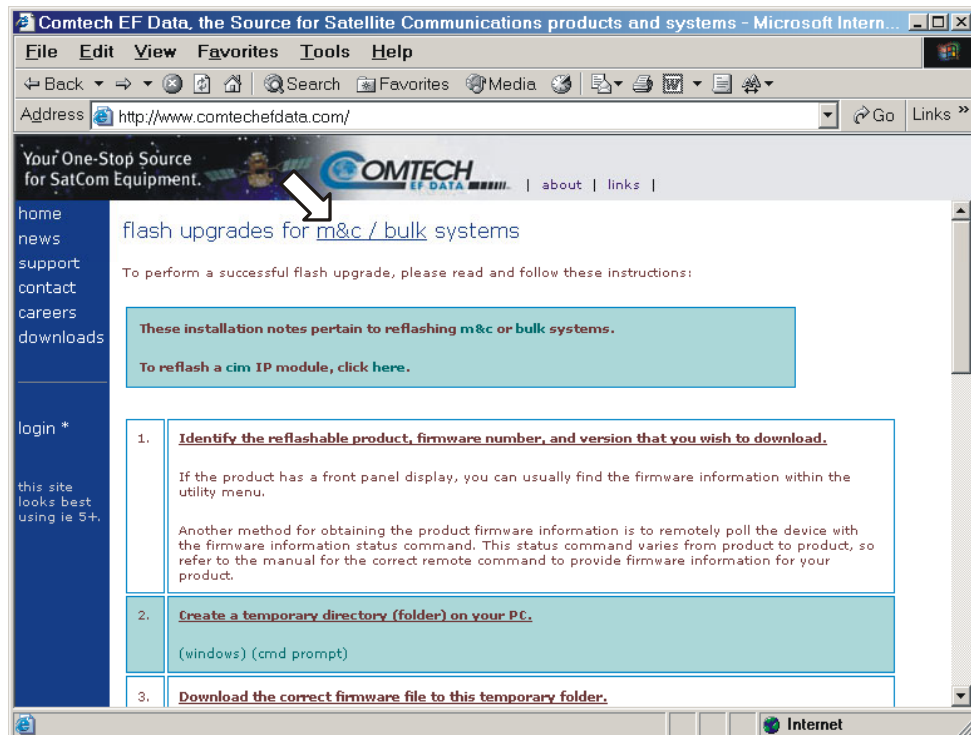
- 1 Create a temporary directory (folder) on your PC.
- 2 Download the correct firmware file to this temporary folders follows:
  - a On the Internet, go the the Comtech EF Data website (<http://www.comtechefdata.com/>).
  - b Click on **downloads**.



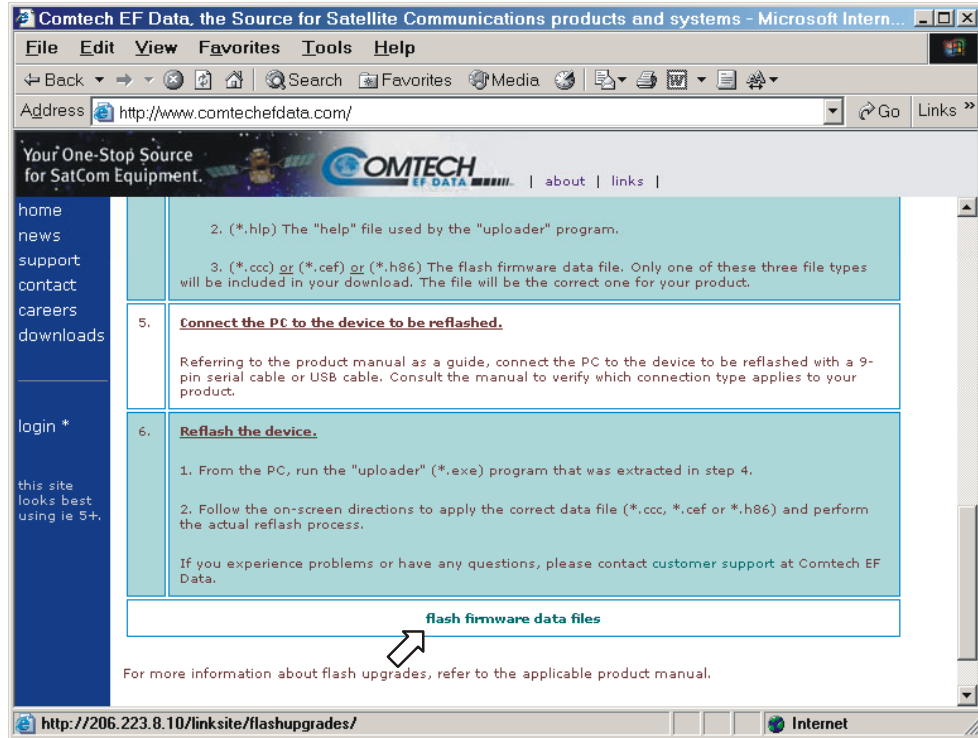
- c Click on **flash upgrades**.



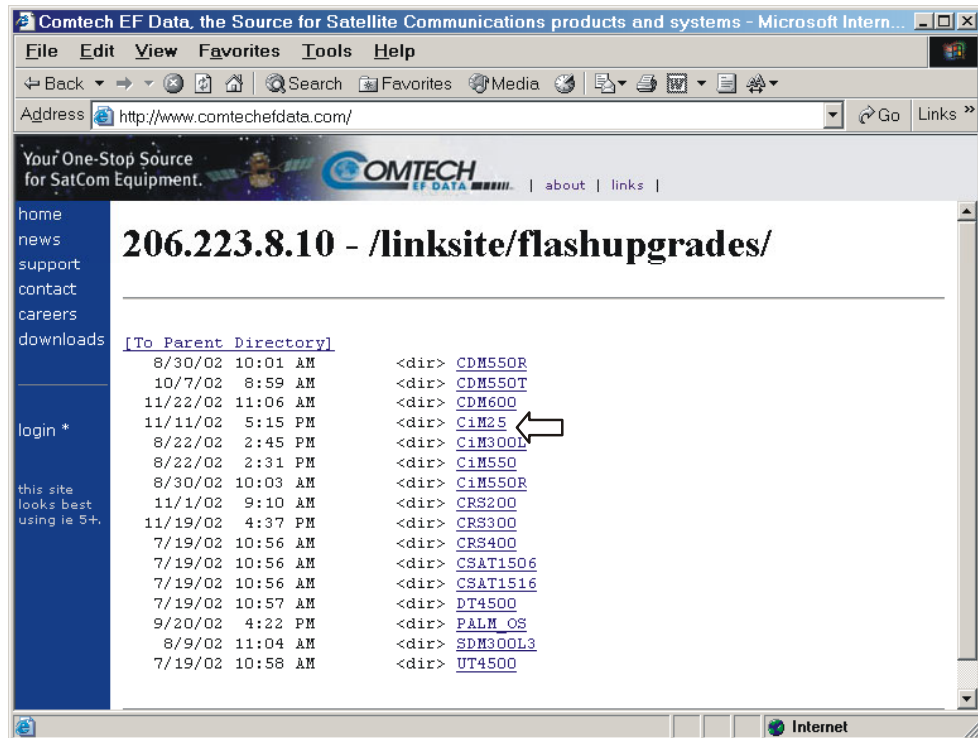
**Note:** The instructions on this page are for M&C (CiM-25/XXX) and BULK systems only.



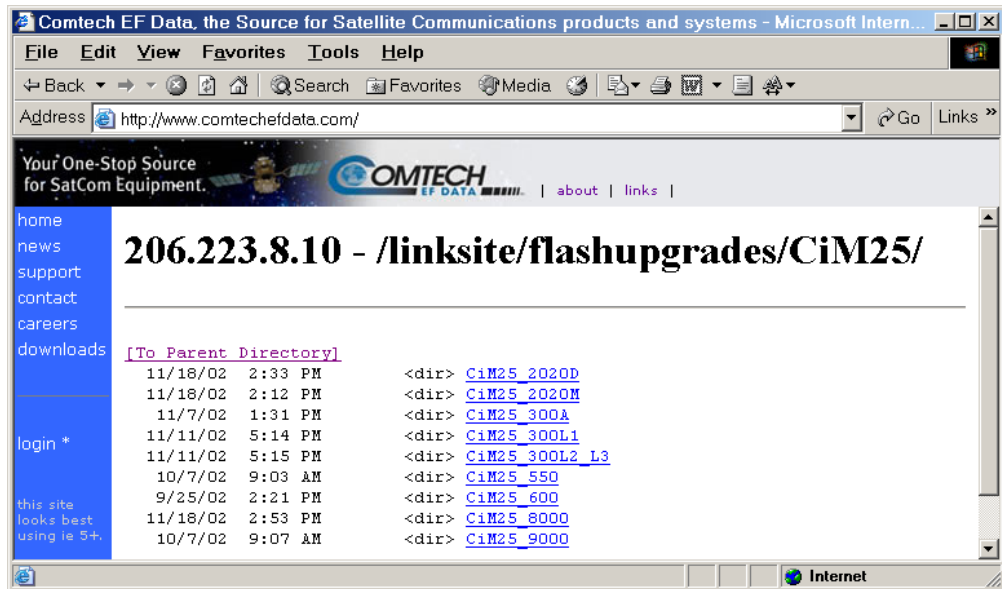
- d Scroll down to the bottom of the page and click on **flash firmware data files**.



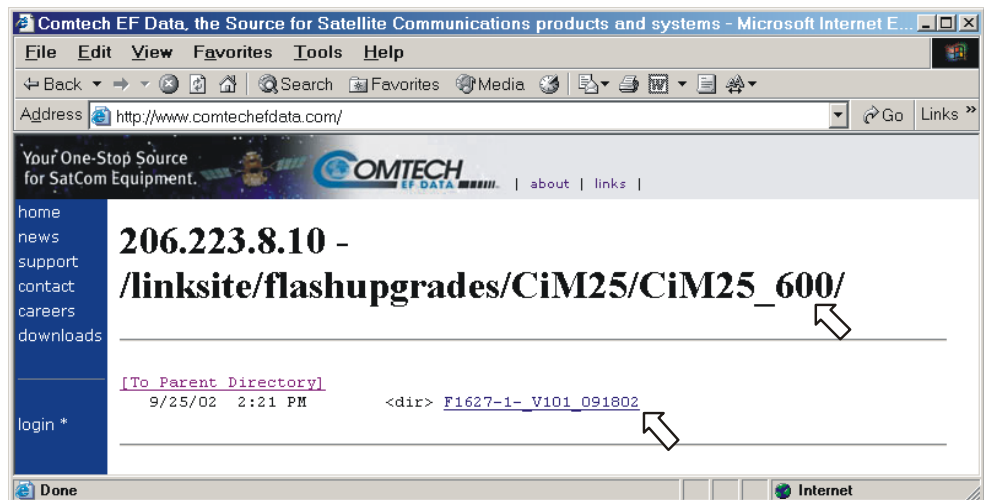
- e Click on the link for **CiM25** data files.



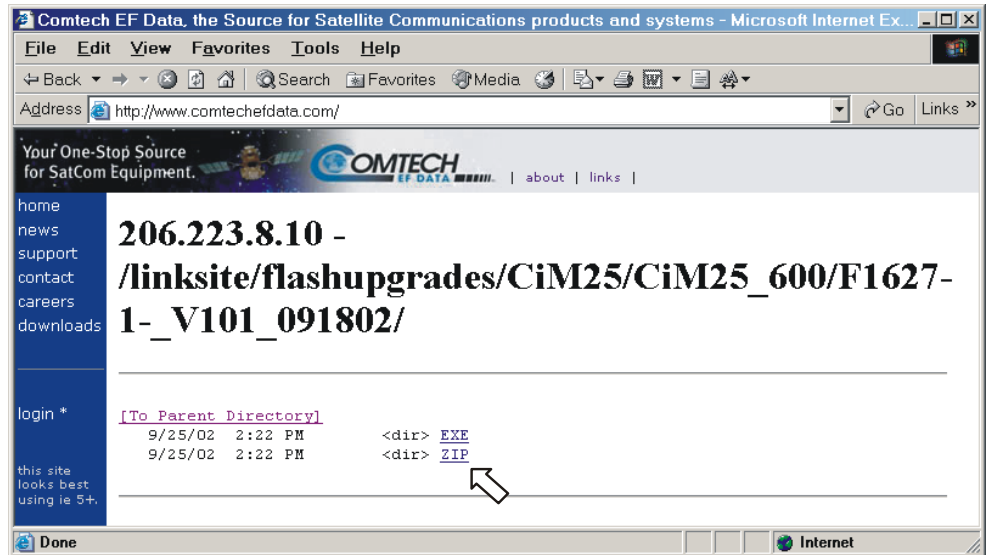
- f Click on the link for your model of CiM-25.



- g The header now shows the model of CiM-25 you have selected (CiM25\_600 in this example). Click on the link to to the data files folder.

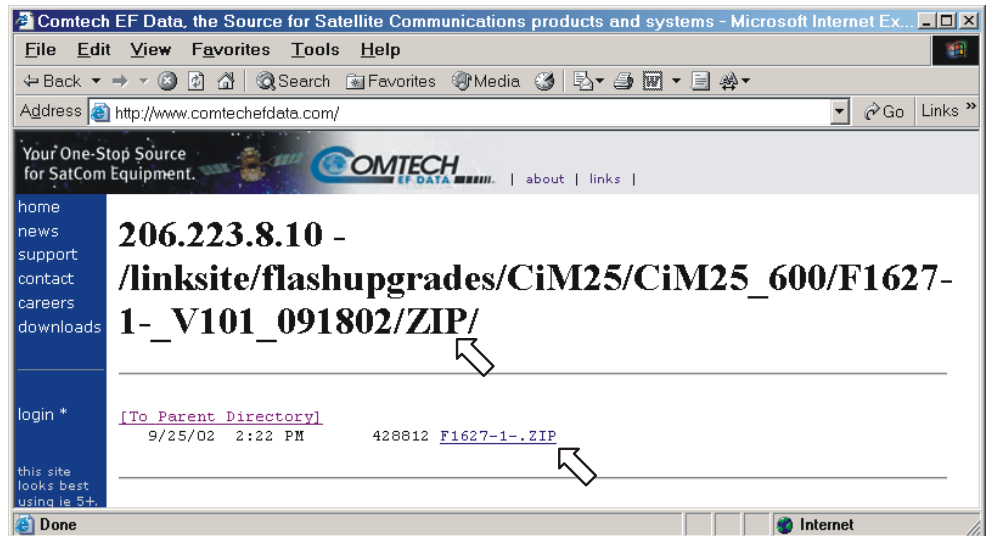


- h Click on the link to to the **ZIP** files folder.

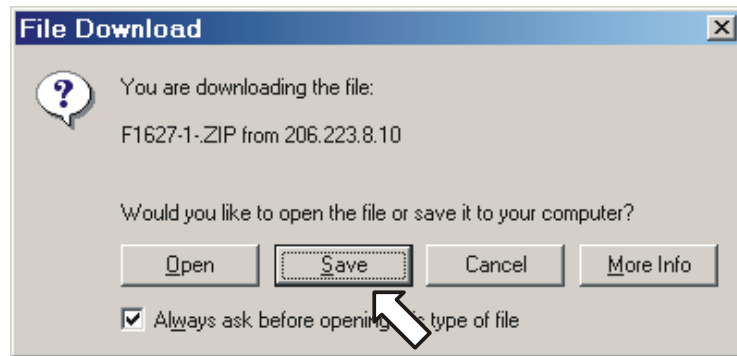


The header now shows shows that ZIP files are selected

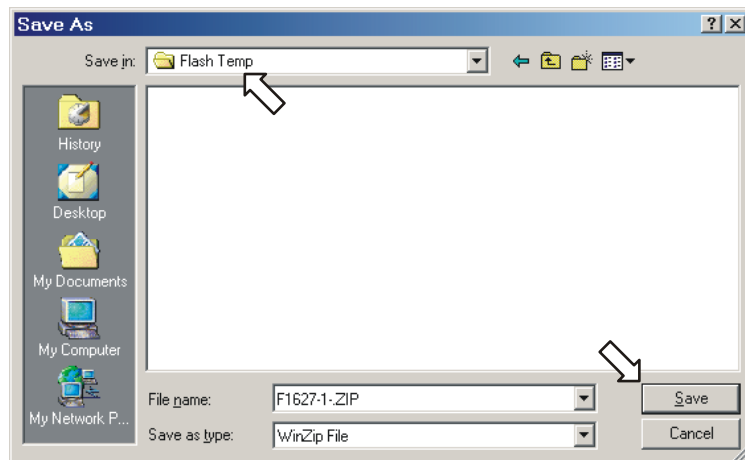
- i Click on the **ZIP** link to start the download.



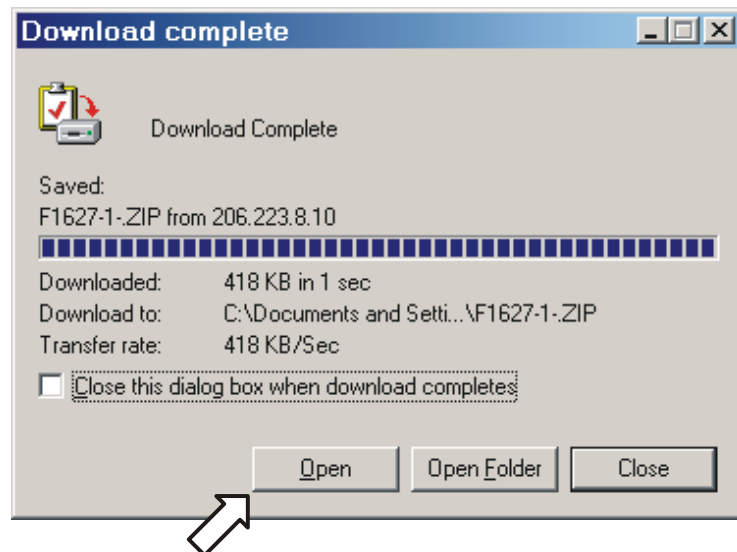
- j Click **SAVE** button.



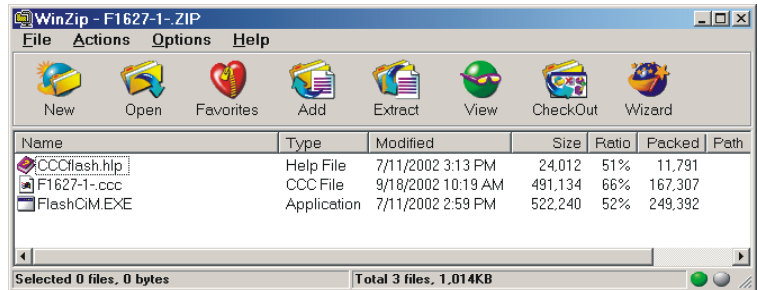
- k Download the ZIP files to your temporary directory (Flash Temp in this case).



- 3 When the download is complete, click **OPEN** to start unzipping the files.



- 4 Extract the files to the temporary folder. At least three files should be extracted, including the following:
  - a **\*.exe** - The **uploader** executable program to apply the flash firmware data file.
  - b **\*.hlp** - The **help** file used by the the **uploader** program.
  - c **\*.ccc** - The flash firmware data file.  
Only one of this type.
- 5 Connect the PC to the device to be reflashed. Refer to Figure 1, Null Cable Diagram.
- 6 Reflash the device as follows:
  - a From the PC, run the **uploader** program that was extracted in step 4.
  - b Follow the on-screen directions to apply the correct data file and perform the reflash process.



If you experience problems or have any questions, please contact Customer Support at Comtech EF Data.





## METRIC CONVERSIONS

### Units of Length

Unit	Centimeter	Inch	Foot	Yard	Mile	Meter	Kilometer	Millimeter
1 centimeter	—	0.3937	0.03281	0.01094	$6.214 \times 10^{-6}$	0.01	—	—
1 inch	2.540	—	0.08333	0.2778	$1.578 \times 10^{-5}$	0.254	—	25.4
1 foot	30.480	12.0	—	0.3333	$1.893 \times 10^{-4}$	0.3048	—	—
1 yard	91.44	36.0	3.0	—	$5.679 \times 10^{-4}$	0.9144	—	—
1 meter	100.0	39.37	3.281	1.094	$6.214 \times 10^{-4}$	—	—	—
1 mile	$1.609 \times 10^5$	$6.336 \times 10^4$	$5.280 \times 10^3$	$1.760 \times 10^3$	—	$1.609 \times 10^3$	1.609	—
1 mm	—	0.03937	—	—	—	—	—	—
1 kilometer	—	—	—	—	0.621	—	—	—

### Temperature Conversions

Unit	° Fahrenheit	° Centigrade
32° Fahrenheit	—	0 (water freezes)
212° Fahrenheit	—	100 (water boils)
-459.6° Fahrenheit	—	273.1 (absolute 0)

Formulas
$C = (F - 32) * 0.555$
$F = (C * 1.8) + 32$

### Units of Weight

Unit	Gram	Ounce Avoirdupois	Ounce Troy	Pound Avoirdupois	Pound Troy	Kilogram
1 gram	—	0.03527	0.03215	0.002205	0.002679	0.001
1 oz. avoird.	28.35	—	0.9115	0.0625	0.07595	0.02835
1 oz. troy	31.10	1.097	—	0.06857	0.08333	0.03110
1 lb. avoird.	453.6	16.0	14.58	—	1.215	0.4536
1 lb. Troy	373.2	13.17	12.0	0.8229	—	0.3732
1 kilogram	$1.0 \times 10^3$	35.27	32.15	2.205	2.679	—



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