IntelliGen[®] NCS Network Communication System

Installation and use manual





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INTRODUCTION

Entegris, Inc. provides this product manual for your information.

Prior to using this manual, the user should verify with the product manufacturer that this is the most recent copy of the product manual.

This manual is owned by Entegris, Inc., an affiliated company for its suppliers and the title shall not pass to the user as a result of the use of the manual.

LIABILITY OWNERSHIP

NOTE: Read the following carefully before continuing.

In no event shall Entegris or its suppliers be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information or any pecuniary loss) arising out of the use of or inability to use this manual, even if Entegris has been advised of the possibility of such damages.

GENERAL MANUAL NOTES

Changes to the Manual

The manufacturer reserves the right to make changes to the product covered in this manual to improve performance, reliability or manufacturability. Although every effort has been made to ensure accuracy of the information contained in this manual, the manufacturer assumes no responsibility for inadvertent errors. Contents of the manual are subject to change without notice.

INTENDED AUDIENCE

w Users must also be familiar with installing and using software on a computer running the Windows[®] operating system.

INTENDED USE AND SCOPE

This manual is intended to be used by experienced technicians for the planning, installation and operation of the described system. This manual contains basic safety information for the installation and use of the system. This manual covers this system only.

WARNING: Mishandling products exposed to a hazardous substance may result in death or serious injury. Always follow the recommendations and guidelines provided by the chemical suppliers and manufacturers. Always appropriate personal protection equipment as required for the chemicals in use. Refer to the Material Safety Data Sheets (MSDS) for each chemical.

SAFETY

Entegris, Inc., requests that the manufacturer is notified by the user of equipment installation, usage and status, and provide appropriate contact information for safety alerts and information regarding the system. Please register usage with an Entegris, Inc., service center.

Please contact the manufacturer with any emergency safety and health concerns.

DANGER: Failure to follow these safety instructions may lead to fire, electric shock, chemical exposure, or other injuries, or damage to property. Read all safety information before usage.

WARNING: Safety is designed into every product. When followed, these minimum guidelines provide an acceptable level of safety for operating and maintaining the system, but are not a substitute for determining internal safety procedures.

Failure to comply with the safety precautions or warnings indicated in this manual violates the safety standards that form a part of the intended use of this equipment. The manufacturer assumes no liability for the user's failure to comply with these requirements.

WARNING: Use of controls, adjustments or procedures other than those specified in this manual without consulting a competent safety professional may result in exposure to potential hazards. Always follow established industrial safety practices when operating this equipment.

CAUTION: End of life statement. Decommissioning of the system, or any part of the system shall be in a manner that is consistent with appropriate regulations and guidelines.

WARNING: Chemicals are not supplied with this equipment. Refer to the chemical suppliers' MSDS for specific health and safety information.

CAUTION: Only technically qualified personnel should install the equipment.

CAUTION: DO NOT use this equipment in any manner not specified by the manufacturer. If the equipment is used in a manner other than specified in this document, the safety protections may be impaired.

CAUTION: EQUIPMENT DAMAGE HAZARD! Turn off power before connecting or disconnecting any cable to the device, or damage may occur.

CAUTION: Shock hazards can exist even when equipment is properly installed.

CAUTION: Do not loosen or remove any panel or cover unless specifically directed to do so by an Entegris service engineer.

HANDLING

CAUTION: The Network Communication System is a sensitive electronic device. Rough handling may cause damage. Do not drop!



SYSTEM OVERVIEW

DESCRIPTION

The Network Communication System (NCS) allows dispense systems to be connected to a Local Area Network (LAN). Once connected to a network, the systems can be accessed by one of more computers on the network, from inside or outside the factory (depending on the LAN firewall setting).

Use of the Network Communication System provides a rapid method to access, program, monitor and update multiple systems.

SYSTEM SPECIFICATIONS

Serial COM ports	(8) RS-422 ports
LAN access to network	RJ-45 10/100 Ethernet Connection supporting DHCP or static configuration
USB accessory	Extension USB (2) USB for future use
Electrical	Power range: 21.6 ~ 26.4 V Current rating: 600 mA
Dimensions	202.4 mm × 107.2 mm × 146.2 mm
Controls	Backlit 2 × 16 character LCD (3) Operating button (16) Activity LEDs

INTELLIGEN NCS NETWORK COMMUNICATION SYSTEM

Environment Indoor use only

Altitude below 2000 m (2187.22 yd)

Ambient temperature 5 – 40°C (41 – 104°F)

Maximum relative humidity 80% for temperatures up to 31°C (88°F) decreasing linearly to 50% relative humidity at 40°C (104°F)

Transient overvoltages category II

Pollution degree 2

DIMENSIONS

Front View



Figure 1. Dimensions

Side View



INTELLIGEN NCS CONTENTS

The IntelliGen NCS ships with the following items:

 IntelliGen NCS, Network Communication System (NETWRK02)



NOTE: The following items are optional. Please purchase separately with NETWRK02

• Optional: AC adapter cable for IntelliGen NCS (P/N NETWRK2SP01)



AC power adapter cable (option) Input: AC100~240 V 50~60 Hz 1.62A Output: DC24V 2.7A

- Optional: RS422 extension cable (3 m) for IntelliGen NCS (P/N NETWRK2SP02)
- Optional: DC power cable for IntelliGen NCS (P/N NETWRK2SP01)

Figure 2. IntelliGen NCS contents

SYSTEM CONNECTIONS

Pinout

Table 1. Pinout connections; 24 VDC power

Pin	Signal name
+	DC24V
-	GND

Table 1. Pinout connections; RS-422 ports (8 ports)

Pin	Signal name
1	ISO_GND
2	RS422_RX- (1-8)
3	RS422_TX+ (1-8)
4	ISO_GND
5	ISO_GND
6	ISO_GND
7	RS422_RX+ (1-8)
8	RS422_TX- (1-8)
9	ISO_GND

Pin	Signal name
1	TXD+
2	TXD-
3	RXD+
4	_
5	_
6	RXD-
7	_
8	_

Table 1. Pinout connections; LAN connection

Table 1. Pinout connections; USB accessory (2 ports)

Pin	Signal name
1	VBS
2	D- (1-2)
3	D+ (1-2)
4	GND

INTELLIGEN NCS NETWORK COMMUNICATION SYSTEM

BACKLIT CHARACTER LCD

Table 2. Displayed contents on the LCD

Number	Displayed	Description
1	IntelliGen NSC	System version
2	IP Address	IP address
3	MAC ADDR	MAC address
4	Version	Version menu
5	Base Release	Base program version
6	sserver	Sserver program version
7	xserver	Xserver program version
8	Web server	Web server program version
9	LCD	LCD program version
10	Status	Status menu
11	Knl	Kernel version, disk space
12	xserver	Xserver status
13	Web server	Web server status
14	sserver	Sserver status
15	COM status	COM status menu
16	COM 1-8	Each COM status
17	Config	Configuration menu
18	Restart	Restart system
19	Halt	Halt system
20	Reset to DHCP	Reset to DHCP

OPTIONAL SETTINGS

If necessary, open the cover and modify the following settings.





INTELLIGEN NCS NETWORK COMMUNICATION SYSTEM

INNER SWITCH

LCD Backlight Switch



Figure 4. Inner switch settings

INSTALLATION

REQUIRED EQUIPMENT AND SUPPLIES

Installation requires RS-422 extension cable for IntelliGen NCS (P/N NETWRK2SP02 or equivalent) to connect individual system units to the IntelliGen NCS.

NOTE: Always use the shortest cables for communication purposes.

Step 1. (Optional): Install IntelliGen NCS

1. Mount the IntelliGen NCS to mouning DIN rail by DIN rail bracket.

Step 2. Connect Wiring

- 1. Connect each device using RS422 cables.
- 2. Connect green connector of AC adapter cable to power supply connector labeled 24V_DC.

NOTE: Please purchase the "AC adapter cable for IntelliGen NCS" (P/N NETWRK2SP01) or "DC power cable for IntelliGen NCS" (P/N NETWRK2SP03).

- Connect plug of "AC adapter cable for IntelliGen NCS" (P/N NETWRK2SP01) to outlet (AC 100-240V).
- OR Connect cables of "DC power cable for Intelli-Gen NCS" (P/N NETWRK02SP03) open end to your system DC 24 volt supply.

NOTE: IntelliGen NCS should be initialized and available, typically in 30 seconds.

5. Connect a standard CAT-5 or later RJ-45 network cable between the IntelliGen NCS to the factory LAN. The LEDs on the connector will light indicating LAN connection and activity.



SYSTEM OPERATION

This section covers the main tasks of installing and using the system.

CONNECTING TO THE INTELLIGEN NCS

- 1. Open the browser on your remote computer.
- 2 Enter the IP Address into the browser's address bar.

The IP Address is the one shown on the backlit character LCD on the IntelliGen NCS.

NOTE: Long push decrement button () when other item is shown or after power up, the LCD displays the IP address. The LCD contents are shown below in this order after power up.

NOTE: The default configuration of the IntelliGen NCS uses DHCP address resolution. If DHCP is not supported in your network, consult yoru IT department to get the static address assigned for each IntelliGen NCS.

The address show on the following are just examples. The address will be different from the one you need to put into the IntelliGen NCS.



Figure 6. IP address location

END USER LICENSE AGREEMENT

- 1. Click on the Entegris logo. The first time you connect to the IntelliGen NCS with your computer, the End User License Agreement will appear.
- 2. Read the end user license agreement, and select "Yes" to continue. The message will not appear again until you install upgrades in the future.

← → & http://10.93.33.95/cgi-bin/index.py	Controlligen NCS ×
File Edit View Favorites Tools Help	
Entegris	IntelliGen NCS pr(tent) End User License Agreement
	Software License Agreement for Entegris® IntelliGen NCS Single Computer License PLEASE READ THIS SOFTWARE LICENSE AGREEMENT ("LICENSE") CAREFULLY BEFORE USING THE HARDWARE IF THE SOFTWARE IS SHIPPED PRE-LOADED ON HARDWARE OR DOWNLOADING THE SOFTWARE ACCOMPANYING THIS LICENSE, AS APPLICABLE, BY POWERING UP THE HARDWARE OR DOWNLOADING THE SOFTWARE, YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS LICENSE, IF YOU DO NOT AGREE TO THE TERMS OF THIS LICENSE, ON OT POWER UP THE COMPUTER OR DOWNLOAD THE SOFTWARE, FOR ENTEGRIS SOFTWARE, INCLUEDE IN THE PURCHASE OF HARDWARE, YOU MUST RETURN THE ENTRE HARDWARE PORCHAGE NO ROBEN TO OBTINUA THE UNTRE, YOU AND TA GREE TO THE TERMS OF THE LICENSE AND HAVE ONLY SOFTWARE TO LOAD, YOU MUST RETURN THE MEDIA ON WHICH THE SOFTWARE IS LOADED IN ORDER TO OBTAIN A FULL REFUND. This agreement is the entire exclusive expression of Entegris, Inc.'s agreement with you and supersedes all prior oral and written communications concerning use of Entegris IntelliGen NCS software. 1. Entegris grants you the right to use one copy of the Software programs contained in the computer or on the media ('Software') on a single computer designated by you when the Software is licensed to you.
	2. The Software is not being sold to you. The Software is owned by Enlegris or it's suppliers and title shall not pass to you as a result of your use of the Software. The license rights aranted to you may not be transferred to another party without the permission of Enlegris. I have read and accepted the lerms of this agreement. Yersion N2000 Enlegris 2017 Time now: Wed Sep 20 14:36:41 2017
	Totakon Theore Line (inv. Yee) dep 20 14-00-41 2017
	2

Figure 7. License agreement

NETWORK SETTINGS

1. Click "Network Settings."

Eile Edit View Favorites	Iools Help
	IntelliGen NCS
Entermin	Intelligentaco
Enlegris	myserver (tart1)
	Welcome to the Entegris IntelliGen NCS
Home	Welcome to the Entegris IntelliGen NCS
Home Downloads Install Updates	Welcome to the Entegris IntelliGen NCS
Home Downloads Install Updates Configure Serial Ports	Welcome to the Entegris IntelliGen NCS Use the navigation links on the left to configure and beg
Home Downloads Install Updates Configure Serial Ports Configure SECS	Welcome to the Entegris IntelliGen NCS Use the navigation links on the left to configure and beg
Home Downloads Install Updates Configure Serial Ports Configure SECS Network Settings	Welcome to the Entegris IntelliGen NCS Use the navigation links on the left to configure and beg
Home Downloads Install Updates Configure Serial Ports Configure SECS Network Settings About	Welcome to the Entegris IntelliGen NCS Use the navigation links on the left to configure and beg

Figure 8. Network settings

2. Consult your IT department for network configuration and advice. The default DHCP works automatically in most networks but you may have additional settings and static IP assigned. Many times they will require or ask for the unique MAC address which is available on the LCD. 3. Enter your hostname, select static or DHCP (automatic) and click "Apply."

If you have a static IP addressed assigned by default, you can configure it here.

4. The default port is a logical TCP/IP connection used for accessing Entegris devices connected to your IntelliGen NCS. The default value (8888) should be fine unless you have a specific need to change it. Depending on firewall and routing issues, you may need to provide this number to your IT department.

NOTE: Because the network settings of the IntelliGen NCS are potentially changing you may lose your connection and have to enter the new IP address or name again in the browser.

The default port is 8888 and should be left untouched unless you are certain you are using an alternate port number.

5. Click"Apply" to take the values affected in the IntelliGen NCS.

A but p/10933395/cgi-bin/networkconfig.py					لروال	
e jetit Were Favorites Tools Help File <	A http://10.93.33.95/	gi-bin/networkconfig.py	D-0	心 IntelliGen NCS	× G	1 🖈 🕸
IntelliGenNCS mysever (tart) Imme Deviced Install Updates Install Updates Install Updates Configure SetCS Network Settings About Entegris.com OHCP: Settings are determined automatically Imme Deviced Integris.com OHCP: Settings are determined automatically Image: Deviced IPADDR Image: Deviced IPADDR IPADDR IPADR IPADR <	le <u>E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> oo	ls <u>H</u> elp				
Home Devinoads Install Updates Server: _ Configure Serial Ports Server: _ Hardware (MAC) Address: b8:27.eb:68.7a.cd • Network Settings • About • Entegris.com • DHCP: Settings are determined automatically • • static: Settings below are used. IPADDR • NETMASK • GATEWAY search nameserver 10.93.64.37 HTTP Listen • Ports • WARNING: An illegal value will prevent web access. Applying the settings will restart the networking and could make this page appear to fail. If this cocurs you may have to wait and re-establish the connection using the new settings.	Entegris	IntelliGen NC myserver (tart1)	S			^
Downloads Server: Hardware (MAC) Address: b8:27:eb:68:7a:cd Configure Serial Ports Gordigure Serial Ports Configure Secis PhCP: Settings are determined automatically About DHCP: Settings are determined automatically Static: Settings below are used. IPADDR IPADDR IPADDR GATEWAY search entegris.com ID 93:64.37 HTTP port 80 is the standard web port. Some forewalls block this and may require an attempt port (suggestion: 802). Leave blank to remove. WARNING: An illegal value will prevent web access. Applying the settings will restart the networking and could make this page appear to fail. If this occurs you may have to wait and re-establish the connection using the new settings. IPADIC <	Home	Configure Network Set	tings			
Install Updates Server:	Downloads					
Configure Serial Ports Hardware (MAC) Address: b8:27:eb:68:7a:cd Configure SECS Network Settings About DHCP: Settings are determined automatically Static: Settings below are used. IPADDR IPADDR NETMASK GATEWAY search entegris.com Anameserver ID:03:04:37 HTTP port 80 is the standard web port. Some frievalts block this and may require an attemate port (suggestion: 8082). Leave blank to remove. WARNING: An illegal value will prevent web access. Applying the settings will restart the networking and could make this page appear to fail. If this occurs you may have to wait and re-establish the connection using the new settings. 	Install Updates	Server: _				
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Network Settings About Entegris.com • DHCP: Settings are determined automatically • Static: Settings below are used. IIPADDR NETIMASK HOSTINANE GATEWAY search entegris.com nameserver 10.93.64.37 HTTP Listen Ports WARNING: An illegal value will prevent web access. Applying the settings will restart the networking and could make this page appear to fail. If this occurs you may have to wait and re-establish the connection using the new settings.	Configure SECS					
About DHCP: Settings are determined automatically Static: Settings below are used. IPADDR RETMASK ROTNAME GATEWAY search entegris.com nameserver 10.93.64.37 HTTP Listen HTTP port 80 is the standard web port. Some firewalts block this and may require an chemater attemate port (suggestion: 8082). Leave blank to remove. Ports WARNING: An illegal value will prevent web access.	Network Settings					
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Applying the settings will restart the networking and could make this page appear to fail. If this occurs you may have to wait and re-establish the connection using the new settings.		GATEWAY search entegris.com nameserver 10.93.64.37				
Apply <		80 HTTP Listen Ports Applying the settings will rest occurs you may have to wait a	HTTI firew alten to re WAR acce art the networking and c and re-establish the com	2 port 80 is the standal alls block this and may hate port (suggestion: 4 nove. NING: An illegal value ss. build make this page ap hection using the new standard the standard the standard standard the standard the standard the standard the standard standard the standard the standard the standard the standard standard the standard the sta	rd web port. Som require an 8082). Leave bla will prevent web opear to fail. If thi settings.	nk s —
		Apply				~

Figure 9. Setting up the network

USER AND ADMINISTRATOR ACTIONS

Typical tasks performed with the IntelliGen NCS include:

- User downloads an MMI from the IntelliGen NCS. See After you have connected your computer to the network through the IntelliGen NCS software, run the appropriate MMI software for your dispense system on this page.
- Connecting to a dispense system and running the MMI software to program or control the dispense system. See *How to run MMI Software* on page 14.
- Administrator uploads MMI or documentation to the IntelliGen NCS or upgrades IntelliGen NCS. See *Installing Updates and Uploading Files* on page 15.

Uploading and Downloading Files

We use the industry software standard terms "Upload" and "Download" in this manual to describe the process of sending files to the IntelliGen NCS or copying files from the IntelliGen NCS, as explained below:

- Download: Obtain copies of software, files, and manuals from the IntelliGen NCS using the "Downloads" function to download (place copies of) files to your networked computer. See After you have connected your computer to the network through the IntelliGen NCS software, run the appropriate MMI software for your dispense system on this page.
- Upload: Place copies of software, files, and manuals from your networked computer to the IntelliGen NCS using the "Install Updates" function to "upload" data to the IntelliGen NSC. Placing copies of files such as MMI software on the IntelliGen NCS can allow easy access to the MMI software from any networked computer. See *Installing Updates and Uploading Files* on page 15.



RUNNING MMI SOFTWARE

After you have connected your computer to the network through the IntelliGen NCS software, run the appropriate MMI software for your dispense system. Obtaining a copy of MMI software once you have connected your computer to the network through the IntelliGen NCS software, you can run MMI software to control or program an individual device. MMI software is provided with compatible Entegris devices and all MMI software functions are detailed in your device's installation and use manual. If you do not have a copy of the MMI software, you can get a copy:

• From the "Download" page on the IntelliGen NCS interface if you have previously uploaded one.

To obtain a copy through the "Downloads" screen:

- 1. Click "Downloads".
- From the "File" menu, select an MMI and press "Run" for operation or "Save" to save a copy to your computer. You can use the "Install Updates" to add .exe and .pdf files to be downloaded as needed.

Entegris	IntelliGen NCS htt (kett)	
Home Downloads Install Updates	Downloads Click on a file to run or view if in a new window. To download a file right	I click on it and click "Save Target as".
Configure Serial Ports Configure SECS	File	Size
Network Settings	putty.eee	421588
Entegris.com	StratusMms.V1005_982.exe	600000
	winscp400.exe	1451520

Figure 10. Download MMI software

How to Run MMI Software

- 1. Open the MMI.
- 2. You can enter the IntelliGen NCS name or IP address in the "Server" field.
- 3. Select the COM port.
- 4. Then you can scan for pumps on that port or enter the address of the pump you wish to access.
- 5. Select a pump to open.
- 6. Click "Connect" to start the MMI software.

NOTE: Network Cautions:

Once connected to a dispense system, note the following precautions:

Other people could potentially be accessing the same dispense system.

The amount of data transferred through a serial COM port is limited. When multiple MMI windows are open to the Realtime display or downloading dispense profiles, the response may be slow and show gaps in Realtime display.

- 7. If you use old MMI, click "Add New" and follow step 2-4 above, then click "Add".
- 8.. Select the item and click "Open" to start MMI.







Figure 11. Making the connection with new MMI software

Install Updates and Uploading Files

This option will upgrade the IntelliGen NCS firmware and can also be used to install versions of the MMI, PDF documentation, and zip files onto the IntelliGen NSC to make these files available to anyone using the IntelliGen.

NOTE: Current version does not support deleting MMI and PDF files.

- 1. Select "Install Updates"
- 2. Press "Browse" to locate the file and find the ENTEGRIS file extension to upload from the menu.
- 3. Press "Install".

NOTE: When updating software, it is recommended that system units be at idle.



Figure 13. Installing software updates

Configure Serial Ports

- 1. Select "Configure Serial Ports."
- 2. Put your access port number into "Internet Port." Default is 8888, but consult your IT department and choose an appropriate value.
- 3. Select the appropriate Baud Rate to communicate with the pump connected to the COM port.
- 4. Leave "Direction" to "OUTPUT to Pumps" if it is connected to the the pump interface.

If you wish to redirect specific COM port to another COM port internally, select the COM port you wish to redirect.

T C C	IntelliGen NCS	5		^
Entegris	pi (tart1)			
Hame	Configure Serial Ports			
Dewnloads				- 1
Install Updates				
Configure Serial Ports	/			_
Configure SECS	Use this page to contigure the se	inal COM ports for baud rate and input or output.		
Network Settings	Internet Port 8888	Notwork part for pump commands (8)	100 is default)	_
About	Server Name pi	Optional Name for this system		
Entegris.com				
	COM1			
	Baud Rate 19.2K V	Direction OUTPUT to pumps V	/dewttyUSB0	
	COM2			
	Baud Rate 19.2K V	Direction OUTPUT to pumps ~	AlemityU381	-
	COM3			
	Baud Rate 19.2K	Direction OUTPUT to pumps V	/dev/ftvUS82	-
	COM4			
	Baud Rate 19.2K V	Direction OUTPUT to numps	(dewtty/JSR3	
	COM5			

Figure 14. Accessing serial ports and setting baud rates

Configure SECS

- 1. Select "Configure SECS" from the menu.
- 2. This is the port used by the SECS HSMS server and must be different from the port assigned to the Serial Server. The default is 5000.
- 3. Enter the SECS Device ID. The default is 255.
- 4. Press "Apply".



Figure 15. Accessing SECS screen

About Screen

The About screen displays the Entegris Network Communication System release version, the serial server (COM ports) version, system and software information.

1. Select "About" from the menu.

http://10.93.33.95/c	gi-bin/about.py	🔎 🗝 🖒 IntelliGen NCS 🛛 🖈 📩	Ö.
0	IntelliGen N	NC.S	^
Entomic	Intoincontri	100	
Linegris	myserver (tart1)		
		110 - NOO	
Home	About Entegris Inte	BillGen NCS	
Downloads			
Install Updates			
Configure Serial Ports	Platform Base	19999	
Configure SECS	DELEASE:	N2000	
Network Settings	Serial Server	0	
About	Version	Enteroris Network Platform 3.0	
Entegris.com	Name:	myserver	10
	COM1 (/dev/COM1);	DISABLED UNLOCKED Baud=57600	
		Serial Commands = 0	
	COM2 (/dev/COM2):	DISABLED UNLOCKED Baud=57600	
		Serial Commands = 0	
	COM3 (/dev/COM3):	DISABLED UNLOCKED Baud=38400	
		Serial Commands = 0	
	COM4 (/dev/COM4):	DISABLED UNLOCKED Baud=57600	
		Serial Commands = 0	
	COM5 (/dev/COM5):	DISABLED UNLOCKED Baud=38400	
	0010 (14-10010)	Serial Commands = 0	
	COMO (/dev/COMO):	DISABLED UNLOCKED Baud=57600	
	COM7 (/dev/COM7)	Senal Commands = 0 DISABLED LINLOCKED Baud=57600	
	com (autoom).	Serial Commands = 0	10
	COM8 (/dev/COM8):	DISABLED UNLOCKED Baud=19200	
		Serial Commands = 0	
	System		
	kernel:	4.4.11-v7+	
	Disk Space:	/dev/root 7653064 5597452 1709828 77% /	
	Uptime:	16:17:46 up 13 min, 0 users, load average: 0.05, 0.07, 0.05	
	Binaries		
	sserver:	-rwxr-xr-x 1 root root 105518 Jul 13 21:13 /usr/sbin/sserver	
		sserver is running.	
	xserver:	-rwxr-xr-x 1 root root 411344 Jul 11 21:32 /usr/sbin/xserver	
		xserver is running.	V

Figure 16. Locating the "About" screen

Entegris Web Page

This page provides link to Entegris.

1 Select "Entegris.com" from the menu.

	IntelliGen NCS	î
Entegris	spy (_tart1)	
lome	Welcome to the Entegris IntelliGen NCS	
Downloads		
nstall Updates	the design of the fight of the test of the second basis where the test of the second basis	
Configure Serial Ports	Use the navigation links on the left to configure and begin using your Network Platform.	
Configure SECS		
Configure Secure Remote Access		
letwork Settings		
About		
Integris.com		

Figure 17. Locating the "About" screen

Link to Entegris will be shown.



Figure 18. Entegris.com screen

INTELLIGEN NCS NETWORK COMMUNICATION SYSTEM

APPENDIX A

OPERATING FLOWCHART



Example



Installation and Use Manual | Rev B | Entegris, Inc.

APPENDIX B

HTTP METHODS FOR DISPENSE INFORMATION AND JOB INFORMATION ON INTELLIGEN MINI

HTTP POST or GET methods although GET method is preferred. The following URL-encoded variables are used with each to identify a specific pump (the default value is shown in braces):

COM= [1] ADDRESS= [1]

In the following examples HOST is the hostname or IP address of the NP querying.

job_info.py

Description

This method is used to set the JobInfo in the pump for the next dispense. A descriptive string (31 characters plus null terminator) can be specified and a 16 bit unsigned integer SlotID number. This information is held in the pump until the next dispense and then attached to the profile information for that dispense and cleared. It must be set before each dispense.

Additional Variable

JOB-INFO= ["None"] SLOT-ID= [0]

Example

http://HOST/cgi-bin/jobinfo.py?COM=2&JOB_ INFO=Wafer%20Info%20String&SLOT_ID=1234

profile_info.py

Description

This method queries the pump for the profile information of the most recent dispense profile for the user profile (0) or dispense confirmation profile (256). This information includes JobInfo and Slot ID as well as the RecipeRSQ value (recipe=RecipeRSQ/256 and DispenseConfirmation=RecipeRSQmod256).

Additional Variable

PROFILE-NUM= [0]

Example

'http://bil-pumplab/cgi-bin/profile_info.py?COM=2

Returns

ProfileNum = 0Cycle = 10924Size = 6052

Interval = 5 Traces = 7 OutletOpen =1 OutletClosed = 202 RecipeRSQ = 356 VentTime = 500 Trigger = 40 ReferenceCycle = 6138 ReferenceProfile = 1 JobInfo = "Wafer Info String" SlotID = 1234

APPENDIX C

GENERAL TERMINOLOGY FOR SVIDS

Pump Timeout

If a pump times out, it will not respond to subsequent inquires from SVIDs for 10 seconds (the pump will reply with an abort response until 10 seconds have elapsed). After 10 seconds, the pump will again attempt to respond to any inquiry.

Command Timeout

If the pump does not respond to an SVID inquiry in 1 second, the system determines that is a command time-out event.

Invalid SVIDs

An invalid SVID will return an empty list from the pump.

COM Port and Address

An SVID includes the COM Port and Address for a given pump. A single S1F3 message (SECS/GEM SVID inquiry), uses the COM Port and Address of the first SVID in the list. To make inquires to multiple pumps, send separate S1F3 messages for each pump. Only one pump can be inquired in an SVID send. Contact Entegris Technical Support for the correct SVID list for your pump or device.

MANUFACTURING INFORMATION

System Relocation Notice

If a CE marked system that corresponds to this technical manual is moved from the original designated country of installation to another country, please contact Entegris, Inc.

Technical Support

For technical support, contact Entegris at +1 800 394-4084.

For product information, quote request, etc, visit www.entegris.com and send us your request through "Contact Us" page.

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