

Service Document

Network Interface Description

4117-SD001_A2

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|------------------------|---|
| Applicable Systems: | Cryostation s-series, Cryostation xp100, microReveal Raman, STEPxyz05 |

Overview of the services available via the network interface functionality of the system control unit.

The network interface on the system is used for a variety of purposes, including:

- Webserver
- Remote Scripting
- Remote Graphical Display
- Montana Instruments Remote Support

To utilize any of the provided network services, connect the System Control Unit to your local network using the Ethernet port on the rear face of the enclosure.

SERVICES

Each service uses a different network port number for communication. You may need to work with your IT department to configure these ports to be allowed through the firewall on your network.

Webserver

Used to provide documentation, scripting examples, service notes, and other support materials.

Standard HTTP port 80

Remote Scripting

Used to allow programmatic control of the system using a remote computer.

- Bach instrument type will use a different network port number for communication:
 - Cryostation s-series: port 47101
 - Cryostation xp-series: port 47102
 - Positioner: port 47104
- Remote scripting must be enabled via the User Interface for each major instrument type that your system consists of (Cryostation, Positioner, etc):
 - MENU > REMOTE CONNECTIONS > Toggle "Instrument Scripting" for each instrument to ENABLED
- Remote scripting commands can be sent using an encrypted SSH tunnel (see Instrument Scripting documentation on the webserver for details)

Remote Graphical Display

Used to control the user interface from a remote computer using Virtual Networking Technology (VNC).

- Non-standard port 2224
- Remote graphical display must be enabled via the User Interface:
 - MENU > REMOTE CONNECTIONS > Toggle "Remote Graphical Display" to ENABLED
- The VNC connection is password protected using a unique password for each system. The password is provided with your system documentation. If lost, contact an authorized service representative to retrieve a copy.
- You will need to install a VNC viewer on your computer. Several free options are available, including:
 - o <u>www.realvnc.com</u>
 - o <u>www.tightvnc.com</u>

Montana Instruments Remote Support

Used by authorized service representatives to remotely access your system to provide diagnostic and troubleshooting support.

If the system is behind a NAT/Firewall the firewall must allow the system to connect a Secure SSH tunnel on port 2223 to mirs.montanainstruments.com

Data Dashboards

Used to view and analyzed system data from a web browser.

- Bach instrument type will use a different network port number for the data dashboard:
 - Cryostation s-series: port 8050
 - Cryostation xp-series: port 8049
- The data dashboards must be enabled via the User Interface:
 - MENU > REMOTE CONNECTIONS > Toggle "Data Dashboards" to ENABLED