

SD4002 Quick Start Guide

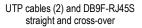
Thank you for purchasing the SD4002 console server. This Quick Start walks you through installation, configuration and local operation. More details are available in the *User Manual* which can be downloaded from *http://opengear.com/documentation*.

Step1 Check kit contents



SD4002 console server







12VDC power pack

Step 2 Connect the hardware

- Attach the four rubber feet to the base (unless SD4002 is to be DIN rail mounted)
- Plug the power pack into the AC mains and connect the DC power cable to the 9V 12VDC power socket on the SD4002 (Alternately the SD4002 can be powered from any +9V DC to +48V DC power source. Connect these power lines to the IN-GND and IN-VIN+ screw jacks)
- > Connect the SD4002 LAN port to your network
- > Connect your serial devices to the two serial ports
 - Port 1 is a dedicated RS232 port with DB-9 male pinout. With the 319018 RJ adapter you can connect to a Cisco RJ-45 serial console using the UTP cable. With the 319018 + UTP + 319017 you can connect to any appliance with a DB9 male serial console.
 - Port 2 can be software configured to be either an RS232 port (which uses the Port 2 DB-9 connector) or an RS422/ RS485 port (which uses the TX+/TXand RX+/RX- pairs on the terminal block):

1	2	3	4	5	6	7	8
+V DC IN	GND	RX+	RX-	TX+	TX-	+3.3V DC OUT	GND

Step 3 Set up the console server

The default console server IP address is *192.168.0.1* (subnet mask *255.255.255.0*). With a web browser on any computer that is LAN connected to the console server:

- > Enter https://192.168.0.1 into the address bar
- **Note:** The LAN connected computer must have an IP address in the same network range (192.168.0.xxx) as the console server. If this is not convenient, you can use the *ARP Ping* command to set the IP address (refer *User Manual* or online FAQ for details). The console server also has its DHCP client enabled by default, so it will automatically accept any network IP address assigned by any DHCP server on your network and will then respond at both 192.168.0.1 and its DHCP address.
 - Log in using the default system user name *root* and the default password *default*, a **Welcome** screen listing the basic configuration steps is displayed
 - Select System: Administration, enter and confirm a new System Password and click Apply

opengea	ſ	System Name: img4004-5 Model: MG4004-5 Firmware: 2.6.0pt Uptime: 6 days, 12 hours, 36 mms, 16 secs Current User: roof
		System: Administration
Serial & Network » Serial Port » Users & Groups » Authentication	System Name	img4004-5 An ID for this device.
» Network Hosts » Trusted Networks » Cascaded Ports	System Description	The physical location of this device.
V Cascaded Ports UPS Connections RPC Connections Environmental Alerts & Logging Port Log	System Password	•••••••• The secret used to gain administration access to this device.
	Confirm System Password	Re-enter the above password for confirmation.
 Alerts SMTP & SMS 	Apply	

To assign your console server a static IP address or to permanently enable DHCP, select System: IP then Network Interface and check DHCP or Static for Configuration Method

Step 4 Configure serial & network devices

Select Serial & Network: Serial Port to display the label, mode and protocol options currently set for the serial port – by default, the two serial ports are set to Console Server mode (refer the User Manual if other modes are required)

opengea	ſ						Firmware: 2.6.0p6 Current User: root
					Serial & I	Network: S	erial Port
Serial & Network » Serial Port » Users & Groups » Authentication » Network Hosts » Trusted Networks	Port #	Label	Mode	Logging Level	Parameters	Flow Control	
» Cascaded Ports » UPS Connections	1	Port 1	Console (Unconfigured)	0	9600-8-N-1	None	Edit

- To configure a serial port, click Edit
- Configure the Common Settings (Baud Rate, Parity, Data Bits, Stop Bits and Flow Control) to match those of the device being controlled

- Select the Console Server protocols (Telnet, SSH, TCP and RFC2217) that are to be used for the data connection to the serial port
- > A **Logging Level** may also be set to specify the level of information to be logged and monitored for the serial port
- **Note:** On Port 1 you will be presented with the option to configure the port for modem access. So if you plan to use out-of-band (OoB) dial-in access connect this serial port to an external modem
 - > Click Apply
 - To enable access through the console server to a locally networked computer (referred to as a *host*), select Serial & Network: Network Hosts and click Add Host

opengeo)L	System Name: in+216 Model: IM4216 Firmware: 2.5.0 Uptime: 2 days, 22 hours, 50 mins, 13 secs Current User: root
		Serial & Network: Network Hosts
Serial & Network » Serial Port » Users & Groups » Authentication	IP Address/DNS Name	The hosts IP Address or DNS name.
» Network Hosts » Trusted Networks » Cascaded Ports	Description	A brief description of the host.
Alerts & Logging » Port Log » Alerts » SMTP » SNMP System	Permitted Services	22bp (seh) 0 23bp (seh) 0 80bp (seh) 0 43hp (seh) 0 1494pp (seh) 0 5500(tep (vnc) - 0 5500(tep (vnc) - 0 Remove
» Administration » Firmware » IP » Date & Time » Dial » Services » DHC Server		O TCP O UDP Port level O - Disabled v Add The TCP services available from the host.

- > Enter the **IP address/DNS Name** of the host
- Edit the **Permitted Services** used for accessing this host, e.g. HTTPS (TCP port 443), VNC (TCP port 5900), or add custom TCP or UDP port numbers only the services specified here are tunneled through to the host, all other services are blocked
- > At this stage you may also specify the level of information to be logged and monitored for each host access
- Click Apply

Step 5 Add new users

Note: It is recommended that you set up a new Administrator user (in the *admin* group with full access privileges) and login as this new user for all ongoing administration functions (rather than continuing as *root*).

- For each new user, select Serial & Network: Users & Groups and click Add User
- Enter a Username and confirmed Password, and nominate the Accessible Hosts and Accessible Ports the user is allowed to access
- To grant limited access to the Management Console, check the user Group, to grant full access to the Management Console, check the admin Group – by default the user is granted no Management Console access. Click Apply



Please register your product to activate the warranty and to automatically receive advice of future firmware updates. Go to: *http://opengear.com/product-registration.html*

opengear		System Name: img4004-5 Model: IMG4004-5 Firmware: 2.6 Uptime: 2 days, 0 hours, 49 mins, 42 secs Current User: ro
		Serial & Network: Users & Groups
Serial & Network		
» Serial Port	Add a New user	
 » Users & Groups » Authentication » Network Hosts 	Username	A unique name for the user.
 Trusted Networks Cascaded Ports UPS Connections 	Description	A brief description of the users role.
» RPC Connections » Environmental Alerts & Logging	Groups	admin (Provides users with unlimited configuration and management privileges) users (Provides users with basic management privileges) A group with oredefined privileges the user will belong to.
» Port Log » Alerts » SMTP & SMS » SNMP	Password	A group with precented privages the user we belong to. The users authentication secret. <i>Note: A password may not be required if remote authentication is being used.</i>
» Sween System	Confirm	Re-enter the users password for confirmation.
» Firmware » IP » Date & Time » Dial » Services	Accessible Host(s)	192.168.0.120 (PBK324, Main incoming switch) 192.168.0.125 (PBK PDU, Baytech PDU) Explicitly allow connections to hosts.
» Services » DHCP Server » Nagios	Accessible Port(s)	Select/Unselect al Ports.
Status		Port 1 Port 2 Port 3 Port 4

Step 6 Advanced configurations

The console server offers many more advanced functions including:

- The Alerts & Logging: Alerts facility monitors serial ports, hosts, user logins, UPSes (Uninterruptible Power Supplies), RPCs (Remote Power Controllers such as PDUs and IPMI devices) and EMDs (Environmental Monitoring Devices). A broad selection of trigger events (such data patterns, temperature or battery levels) can be specified. When triggered, a warning email, SMS, Nagios or SNMP alert is sent to a nominated destination.
- Extensive management of UPSes and RPCs using open source *NUT* and *Powerman* tools. The **Manage: Power** facility enables both administrators and regular users to monitor and control attached PDU power strips, and servers with embedded IPMI BMCs.
- Historical logs of all communications with serial and network attached devices, system activity, UPS and PDU power status, environmental status, etc. The level of logging is set as ports and devices are configured, Alerts & Logging: Port Log allows this history to be saved locally or remotely. Logs can be viewed from the Status and Manage menus.
- Other advanced features, such as Serial Port Cascading, remote Authentication, Trusted Networks, Secure Tunneling, Nagios Distributed Monitoring, the Command Line interface – these are covered in detail in the User Manual