

IMG4004-5

Quick Start Guide

Thank you for purchasing the IMG4004-5 console server. This Quick Start walks you through installation, configuration and local operation. For more details please refer to the *User Manual* on the CDROM.

Step 1 Check kit contents



IMG4004-5
Management gateway



UTP cables (2) and DB9F-RJ45S
straight and cross-over



Quick Start &
CD-ROM



5VDC IEC power
supply and cable

Step 2 Connect the hardware

- Plug the power supply into the AC mains and connect the DC power cable to the *5VDC* power socket on the IMG4004-5
- Connect the *NETWORK* port to your network, connect your serial devices to the IMG4004-5 serial ports *PORT 1-4* and management LAN devices to the Ethernet ports *ETH 1-4*

Note: If you plan to use out-of-band (OoB) dial-in access, connect an external modem to the *LOCAL* port. If you plan to use broadband OoB, connect the access device (such as DSL modem) to *ETH1*.

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
- Log in using the default system user name *root* and the default password *default*, a **Welcome** screen listing the basic configuration steps is displayed

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.

- Select **System: Administration**, enter and confirm a new **System Password** and click **Apply**

The screenshot shows the OpenGear System Administration web interface. The page title is "opengear" and the system name is "img4004-5". The page shows the "System: Administration" configuration page. The System Name field contains "img4004-5". The System Description field contains "An ID for this device.". The System Password field contains "*****". The Confirm System Password field contains "*****". There is an "Apply" button at the bottom.

- 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**

The IMG4004-5 has an integrated VLAN switch that provides an Ethernet management LAN (with firewall/router isolation and DHCP server). By default these ports are inactive.

Ethernet port *ETH 1* can be configured as a broadband failover or OoB access port – to activate, refer to the *User Manual* – otherwise leave **Failover Interface** at its default select, **None**.

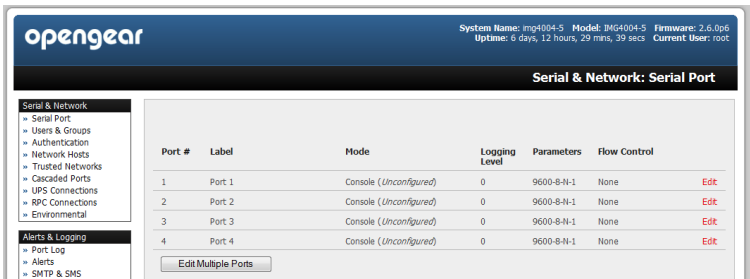
To activate the management LAN gateway:

- Select **System: IP** then **Management LAN Interface** and uncheck **Disable**
- Enter the **IP Address** and **Subnet Mask** for the Management LAN network segment, leaving **Gateway** and **DNS** fields blank)
- If you wish to use the DHCP server, refer to the *User Manual*

Step 4 Configure serial & network devices

- Select **Serial & Network: Serial Port** to display the labels, modes and protocol options currently set for each serial port – by default all serial ports are set in Console Server mode (refer the *User Manual* if other modes are required)
- 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 that port

- A **Logging Level** may also be set to specify the level of information to be logged and monitored for each that port. 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**



- 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 enter and confirm a **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>

The screenshot shows the OpenGear web interface. At the top, it displays system information: System Name: rpg4004-5, Model: BM4004-5, Firmware: 2.6.0, Uptime: 2 days, 0 hours, 49 mins, 42 secs, Current User: root. The page title is 'Serial & Network: Users & Groups'. The sidebar menu includes: Serial & Network (Serial Port, Users & Groups, Authentication, Network Hosts, Trusted Networks, Cascaded Ports, RPC Connections, RPC Connections, Environmental); Alerts & Logging (Port Log, Alerts, SMTP & SMS, SNMP); and System (Administration, Firmware, IP, Date & Time, Dial, Services, DHCP Server). The main content area is titled 'Add a New user' and contains the following fields: Username (A unique name for the user.), Description (A brief description of the users role.), Groups (admin (Provides users with unlimited configuration and management privileges), users (Provides users with basic management privileges)), Password (The users authentication secret. Note: A password may not be required if remote authentication is being used.), Confirm (Re-enter the users password for confirmation.), Accessible Host(s) (192.168.0.120 (PBX324, Main incoming switch), 192.168.0.125 (PBX PDU, Baytech PDU)), and Accessible Port(s) (Explicitly allow connections to hosts.).

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 users to monitor and control PDU power strips, and servers with embedded IPMI BMCs.
- ❖ Connect EMDs to any serial port (with an adapter) and remotely monitor the temperature, humidity, physical access, smoke alarms, etc. Details are provided in the *EMD5000 Quick Start* supplied with the EMD.
- ❖ 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*, *Failover* and *Out-of-Band Access*, the *Command Line* interface – these are covered in detail in the *User Manual* on the CDROM.

Note: On the CDROM you will find the *PortShare* and *SDT Connector* software tools. *SDT Connector* provides you with secure, point and click access to the console server and all the attached devices. *PortShare* connects the COM/tty port applications on your Windows PC, Linux server or virtual machine to the serial devices attached to the console server. **Refer to the provided *Quick Starts* for details**