



SD4000

Secure Device Servers

Applications

- General data acquisition applications
- Medical monitoring automation
- Network and power management
- Central control of remote PC appliances
- Remotely turn on, off and reboot equipment
- Industrial and building automation
- Retail and point of sale
- Secure data acquisition
- Remote energy metering
- Security and access control systems

Features and Benefits

- Securely connects serial devices to 10/100Base-T Ethernet network
- Centrally access distributed PCs and smart appliances with VNC or Remote Desktop
- Secure remote browser control of devices with SSH tunneled HTTP connection
- Monitor and control RS-232/422/485 serial devices
- Powerful security support, SSH, SSL, RC4 and 3DES.
- COM port/TTY redirection from Windows, Linux and UNIX
- Rock solid stability (robust Linux software)
- User scripting with full Linux kernel access
- Automated alerts and alarm management
- Local and remote data logging
- Simple SD4000 configuration and administration via Web, Telnet/SSH or serial port

The most secure way to remotely or locally access and control any device with an RS232/422/485 serial port or an Ethernet port



The SD4000 secure device servers connect devices to the local Ethernet network or the Internet, and ensure that information is transmitted securely, to and from these devices. The SD4000 attaches to these devices through their serial or their network ports; and then communicates using the same high-level data transport and security standards used around the world by system administrators and IT professionals to securely manage their data centers.

Users can now remotely monitor, access and manage machines over the Internet, confident their machine networks do not become a source of vulnerability. Their business and control applications can safely connect to distributed and remote devices.

SD4000 provides secure reliable and affordable local and remote access to the serial console ports on meters, SCADA appliances, PLCs, and sensors. The tunneled HTTP support also enables monitoring and control of network infrastructure (switches, firewalls etc), and management of general appliances (security, power switches etc). And the tunneled VNC, Remote Desktop and VNC/RDP-over-serial, enables the user to securely control distributed Windows PCs and manage embedded PC devices.

The compact size of the SD4000 device servers makes them the ideal choice for connecting RS-232/422/485 serial devices to an Ethernet network, making it possible for software to access serial devices anywhere on a local network.

The Most Secure Way to Connect, Monitor, Manage and Control Devices

The SD4000 at a remote site can be accessed remotely (through the Internet or a dial-up modem) or locally (through the local network or a serial connection). All connections are secure, with encrypted access to remote systems using up to 128-bit AES encryption. SD4000 also provides a selection of filtering and access logging facilities. All console logs can be archived off line. Access also can be restricted by IP address, by password, or by account. So managers can securely control and manage their distributed networks of devices.

Unlike basic Ethernet-to-serial appliances, the SD4000 family is rich in features. Communications with connected devices can be logged, locally or remotely. Triggers to send email or raise other alerts can be set in response to defined events (eg when a particular data string is received from a nominated serial device). The SD4000 also works with the widest range of third party network equipment, power controllers etc.

The SD4000 range has been optimized for stand-alone secure device management. The simple Web browser interface allows the user to easily configure the appliance, set security levels and access the ports. The user also can interface directly at the command line with the embedded Linux kernel.

OpenGear's secure device servers are built on open source standards, leveraging the strength, the security and the broad services of Linux.

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SD4000 Family Specifications

FEATURES

Control Serial Port Connected Devices

- Telnet/SSH/Raw TCP connect
- COM port redirection software
- RFC 2217 -Telnet Com Port Control
- Access by TCP port
- Port triggers and alerts
- Offline data logging (Syslog, NFS, CIFS)
- Online data buffering
- Multiple users per port (with port sniffing)
- Windows Remote Desktop over serial support
- Break over SSH support

Control Network Connected Devices

- Secure SSH tunnel access to unlimited network devices
- Secure Remote Desktop to (embedded) Windows appliances
- Secure VNC access to all computers
- Secure HTTP access to browser controller devices
- Secure Telnet access to console appliances

Security and Authentication

- Secure Shell (SSH V2)
- TACACS+ , RADIUS and LDAP authentication
- PAP/CHAP authentication (dial up)
- Per port user access lists
- Dial back support
- Local authentication
- System event syslog
- IP forwarding support and IP packet filtering

SD System Management

- Secure Web management (HTTPS)
- Local browser management (HTTP)
- Command Line interface (Linux Shell)
- ARP IP assignment
- SNMP

Accessibility

- Local Ethernet or remote Internet
- Dial-up modem or local serial port access

Other Protocols Supported

- DHCP for dynamic IP assignment
- NTP for time synchronization
- PPP for dial up access

Upgrades

- Flash upgradeable (free from online FTP site)
- FTP, TFTP client for file transfer

Operating System

- Linux - Source code access enables custom configuration

Models

- SD4002: 2 port unit
- SD4008: 8 port unit
- Cabling and adaptors

HARDWARE

Ports

SD4002: 1DB9 RS-232 and 1DB9/connector block RS-232/422/485 (software selectable) serial port (2400 to 230,400bps. Surge protected)
SD4008: Eight RJ-45 RS-232/422/485 (software selectable) serial ports (2400 to 230,400bps, Surge protected) and one DB-9 RS-232 local / modem port (2400 to 115,200 bps)
1 RJ-45 10/100Base-T Ethernet port

Cables

RJ-45 CAT5 cables (6 ft)
RJ-45 to DB-9 adapters (straight & cross-over)

Power

SD4002: External +9V to +48V DC
Optional 12VDC wall mount adapter 100-240V AC, 50/60 Hz
SD4008: 5VDC 100-240V AC adaptor 50/60 Hz
Optionally use external -48V, +5V or +48VDC
Power consumption less than 20W

Dimensions

SD4002: 3.9 x 2.8 x 1.0 in (10 x 7.2 x 2.5 cm) Wall mount or DIN mount kit
SD4008: 8.2 x 4.9 x 1.2 in (20.8 x 12.6 x 4.5 cm) Desktop or wall mount

Environmental

Ambient operating temperature: 5°C to 50°C (41°F to 122°F)
Non operating storage temp.: -30°C to +60°C (-20°F to 140°F)

Humidity

5% to 90%

Regulatory

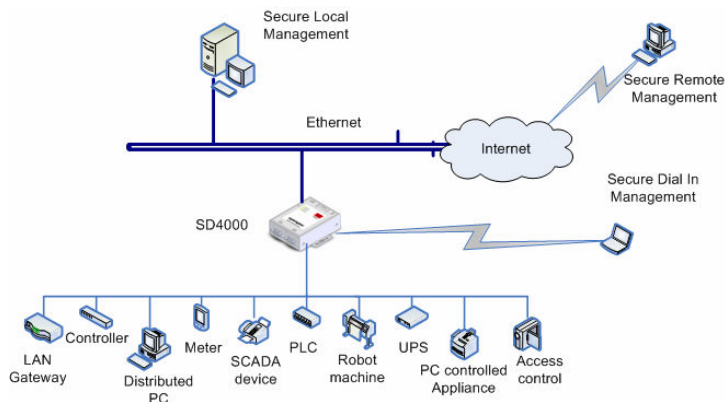
FCC Part 15 A UL 1950
CE (EN55022 A, EN55024, EN60950)
TUV C-Tick

GPU

166MHz ARM-based System on Chip (Micrel KS8695P)

Memory

SD4002/ 4008: 16MB SDRAM 8MB Flash



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