IOLAN SDG2 LA/LE Quick Start Guide

The SDG2 Lx (x = A for North American model, x=E for European model) provides Serial to LTE/3G and Serial to Ethernet connectivity. The SDG2 L offers support for a broad range of 4G LTE cellular data networks, extensive security, flexibility and IPV6 technology. This guide covers basic installation and configuration and is intended for first time setup or product evaluation.
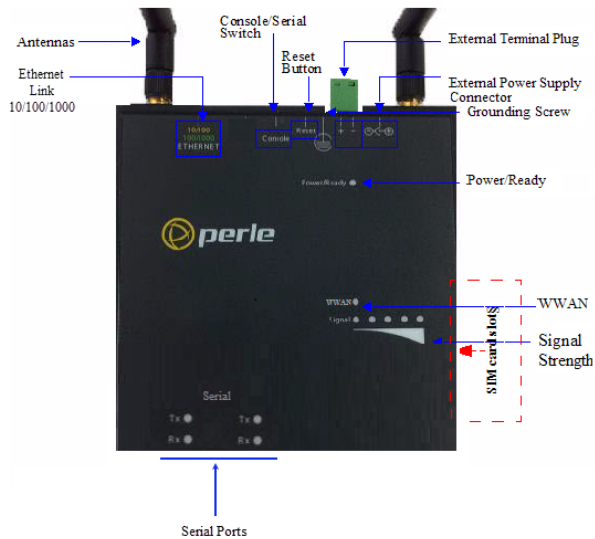
Complete details can be found in the following guides at *www.perle.com/downloads*.

- IOLAN User's Guide
- IOLAN Command Line Interface Reference Guide
- IOLAN SDG2 LA/LE Hardware Installation Guide

What's in the box?

- ✓ The IOLAN SDG2 LA or SDG2 LE
- ✓ Quick Start Guide (this document)
- ✓ 2 X LTE antennae
- ✓ Power adapter, strain relief strap and rubber feet
- ✓ Wall mount brackets

Hardware Overview

IOLAN SDG2 LA/LE Quick Start Guide- P/N 5500407-10 (Rev C)

Button/Switch Functions

Reset Button

To reboot the IOLAN SDG2 Lx insert a paper clip into the inset hole labelled as Reset and gently press inwards and release. The Power/Ready LEDs on the IOLAN SDG2 Lx will go On and then momentarily Off when released to show that the unit has been rebooted. If you hold the reset button between 3 and 10 seconds, the IOLAN SDG2 Lx will reset the configuration to factory default (either the Perle or custom default configuration). If you hold the reset button greater than 10 seconds, then the IOLAN SDG2 Lx will reset the configuration to the Perle factory default configuration.
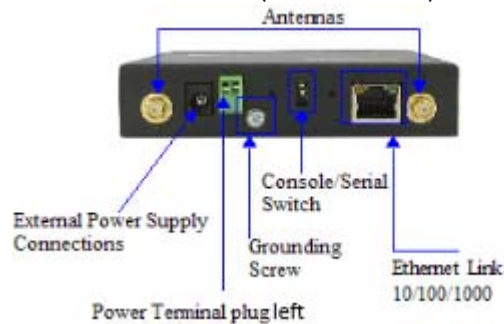
Console Switch

The dip switch on the IOLAN SDG2 Lx is set in the factory to serial (down position). Unless you plan to attach a console to port 1 of the IOLAN SDG2 Lx, leave the dip switch in the serial position

Connecting the Hardware

Power

Either the barrel or TB (Terminal Block) can be used to power the IOLAN SDG2 Lx.

Connecting the barrel connector

Plug the power adapter into a power socket and connect the barrel connector end into the IOLAN SDG2 Lx. The power/Ready LED should show a solid green.

Connecting the terminal block connector

1. Ensure power is NOT applied to the wires prior to connection.
2. On each end wire (12-20 AWG), remove the insulation from the copper wire 5 mm (3/16 of an inch).
3. Loosen the left screw on the top of the terminal connector block, then insert your positive (+) wire into the left terminal and screw it down tight (.51Nm torque). Loosen the right screw on the top of the terminal connector block, then insert your negative (-) wire into the right terminal and screw it down tight (.51Nm torque).
4. Re-insert the terminal block connector if removed.
5. Connect the power cord strain relief, if desired. See SDG2 LA/LE Hardware Installation Guide for details.

6. Connect the grounding lug (not provided) to the grounding screw, if desired. See IOLAN SDG2 LA/LE Hardware Installation Guide for details.

Connecting the Antennas, Ethernet cable and serial device
1. Connect the LTE antennas by simply screwing the antennas onto the connectors on the IOLAN.
2. Connect the Ethernet cable (Cat5/5e) from the RJ-45 plug (10/100/1000) to the HUB or switch that will provide network connectivity (if applicable to your application).
3. Connect the serial devices to the RJ45 serial ports. See the SDG2 LA/LE Hardware Installation Guide for pinout details.

Turn on power at source.

Power On Cycle

When the power is connected to the IOLAN, the Power/Ready LED will cycle through several sequences and will end in a solid green once the unit is fully booted and ready to be configured. If the LED is not solid green after two minutes, see the SDG2 LA/LE Hardware Installation Guide.

LED Guide

System Ready
- **Green Solid**—System Ready
- **Flashing**—System is booting or DIP switch is in console mode
- **Amber**—**Flashing**—Booting
- **Red**—Error condition. See IOLAN SDG2 LA/LE Hardware Installation Guide

Link 10/100/1000 (on Ethernet Link Connector)
- **Green**—1000 Mbps (flashes with activity)
- **Green/Amber**—100 Mbps (flashes with activity)
- **Amber**—10 Mbps (flashes with activity)
- **Off**—No LAN connection

WWAN Status
- **Green**—A wireless connection has been established / activity
- **Green flashing**—Data is being transmitted over the wireless network
- **Off**—No wireless connection is established

Signal Strength
- **Amber**—progressive signal strength
- **Green** –increase in signal strength

Serial Activity
  Off—No serial activity
  On—Tx/Rx flashes with transmit/receive serial activity

Connecting the IOLAN to the WWAN Network

Micro SIM card

The SDG2 Lx requires that a Micro SIM (3FF) card be installed in the unit. The Micro SIM card will be provided to you by your network provider/carrier.

Installing the Micro SIM card

1. Remove the screws from the side of the SDG2 Lx unit, and then remove the cover plate. See *Figure 1*.
2. Insert your SIM card in the slot. The SIM card will only fit one way (do not force the SIM card in or you could damage your SDG2 Lx). Gently press the SIM card forward until you hear it click into place within the slot.
3. Replace the cover plate and secure it to the SDG2 Lx with the screws.

Figure 1

Configuring IOLAN SDG2 Lx

To configure the IOLAN SDG2 Lx you should first assign an IP address to it. The simplest way to set the IP address is to use one of the following methods;

- Easy Config Wizard
- Device Manager

The Easy Config Wizard utility and the full featured Device Manager PC software can be downloaded from the Perle website at *www.perle.com/downloads*.

To initially log onto the IOLAN SDG2 Lx user the following credentials;

User name: admin

Password: superuser (case sensitive)

Note: You should change the admin password to restrict unauthorized access to your SDG2 Lx.

You are now able to configure the rest of the operating parameters of the IOLAN such as the LTE APN which is provided by your network provider/carrier.

For additional information on the various configurable operating parameters as well as methods of configuring your IOLAN (i.e. HTTP, Telnet, SNMP), please refer to the IOLAN User's Guide.

Registering the IOLAN

You should register IOLAN online at:

www.perle.com/support_services/warranty_reg.asp

Contacting Technical Support

Contact information for the Perle Technical Assistance Center (PTAC) can be found at the link below.

www.perle.com/support_services/support_request.shtm