

This guide covers basic installation and configuration and is intended for first-time setup or product evaluation.

Complete information can be found at

[www.perle.com/downloads](http://www.perle.com/downloads).

- IOLAN SCR User's Guide
- IOLAN SCR Command Line Reference Guide
- IOLAN SCR Hardware Installation Guide

### **For IOLAN SCR/SCRC combo**

- ✓ IOLAN SCR unit
- ✓ Rack mount brackets
- ✓ One Perle pre-installed 10/100/1000 copper SFP
- ✓ Optional 2 x Power cables with country-specific plug (IOLAN SCR PN dependent)

### **For IOLAN SCR/SCRC combo**

#### **For network connections**

- ✓ Ethernet CAT5/5e/CAT6 10/100/1000BASE-T cables to connect to your network
- ✓ Perle SFP modules (if you want to use fiber/copper SFPs)
- ✓ Fiber cables (if you are using SFP fiber modules)

#### **For remote management**

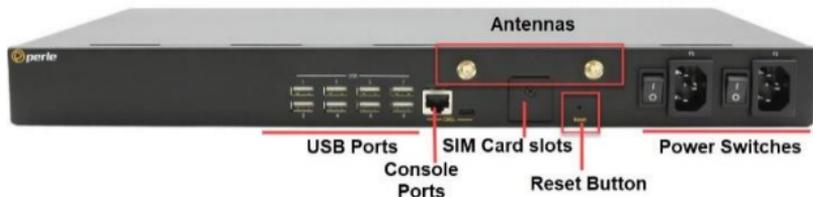
- ✓ Serial cables to connect serial devices to your SCR unit
- ✓ Ethernet CAT5/5e/CAT6 10/100/1000BASE-T cables to connect Ethernet devices to your SCR

## For the SCRC models:

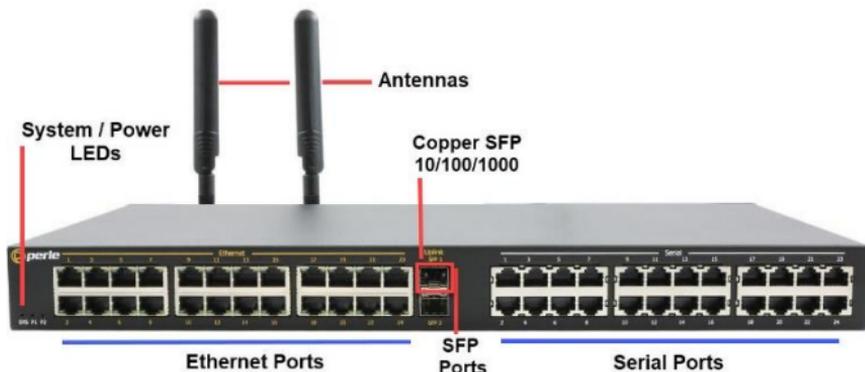
- ✓ SIM cards from your cellular provider
- ✓ 2 X Perle Antenna Base PN 08000500
- ✓ 2 X Perle5G/4G Antenna SMA PN 08000570

## Hardware Views

### SCR Console/USB Port View with Cellular



### SCR256/SCRC256 Serial/Ethernet Port View



## LEDS

	LED Colour/Action	Description
SYS	Off Red Amber-solid Amber-flashing Green-solid Green-flashing	No power Power has been applied Kernel loading System is booting Normal operation No configuration or in Safe Mode

PWR1	Off Green-solid-On Amber-solid	No power was supplied to PWR 1 Power 1 is On Dual power enabled, power supply 1 is not operational
PWR2	Off Green-solid-On Amber-solid	No power was supplied to PWR 2 Power 2 is On Dual power enabled, power supply 2 is not operational

## Powering up the SCR for the First Time

Connect 1 or 2 power plugs to the power sockets. Turn the power switch/s to the ON (UP) position. The SYS LED will slowly blink amber until the unit is fully powered. When a flashing green System LED appears, the SCR has no configuration and is ready to start the Fast Setup sequence. If dual power is used, PWR LEDs 1 and 2 will be lit.

## Setting up the SCR for the First Time

The IOLAN can be initially set up using DHCP (ZTP Mode) or via the Fast setup method using an Ethernet or console connection.

### Option 1–DHCP Mode

Your IOLAN is in factory default mode with the DHCP client enabled on all the up-link (SFP) ports. Connect one of your up-link ports to your network to allow it access to your DHCP server. The DHCP server can now provide IP information to the IOLAN and, optionally, a complete configuration file and/or firmware image. If the IOLAN cannot connect to the DHCP server in approximately 1 minute after the IOLAN has fully booted, it will revert to a configuration with all up-links bridged to a 192.168.0.x subnet with the IOLAN assigned to the 192.168.0.1 IP address. At this point, you can use a browser on a PC which

is on the 192.168.0.x network to access the IOLAN. You can HTTP/HTTPS to 192.168.0.1 to access Fast Setup mode.

To set a static IP address on your PC, follow the procedure below.

1. Within your PC's Window's operating system or equivalent, select Control Panel, then >Network and Internet >Network Sharing Center >Ethernet >Properties > Internet Protocol Version 4 (TCP/IPv4), and set your PC address to **192.168.0.2/255.255.255.0** then click Ok
2. When the System LED is flashing green, use a web browser and enter <http://192.168.0.1> to access your IOLAN.

## **Option 2–Ethernet connection to IOLAN**

By default, all the copper ethernet ports are bridged. The bridge is assigned the IP address of 192.168.1.1 (255.255.255.0) with the DHCP server disabled. At this point, you can use a browser on a PC which is on the 192.168.1.x network to access the IOLAN. You can HTTP/HTTPS to 192.168.1.1 to access Fast Setup mode.

To set a static IP address on your PC, follow the procedure below.

1. Within your PC's Window's operating system or equivalent, select Control Panel, then >Network and Internet >Network Sharing Center >Ethernet >Properties > Internet Protocol Version 4 (TCP/IPv4), and set your PC address to **192.168.1.2/255.255.255.0** then click Ok
2. When the System LED is flashing green, use a web browser and enter <http://192.168.1.1> to access your IOLAN.

### Option 3–Console

Connect a terminal to either the RJ45 or USB console port of the IOLAN. Ensure your terminal is set to 9600 baud, 8 bits, no parity, one stop bit, and no flow control. Press “Enter” on the terminal, and you should now see the Fast Setup prompt.

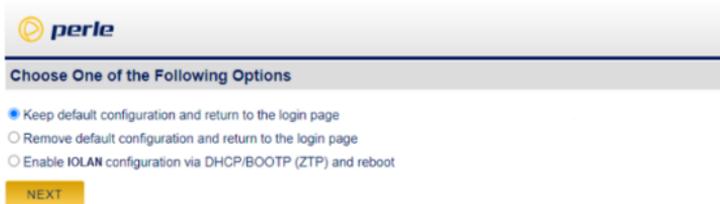
If using a web browser, the following screen should appear.



On the setup screen, select Get Started or See Options.

1. If you select Get Started, fill in the required fields, apply the changes, then save and exit. The configuration changes will be immediately applied to the IOLAN. You can now access your IOLAN’s complete configuration using the credentials you supplied from the WebManager.

2. If you select See Options, the following screen appears.

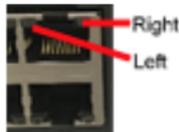


The third option, “Enable IOLAN configuration via DHCP/BOOTP (ZTP), and reboot,” will cause the IOLAN to reboot. After the software is fully loaded, the up-link ports will be in DHCP client mode and will remain in this mode indefinitely.

## Connecting Ethernet Devices

The Ethernet RJ45 ports provide the standard Ethernet interface speeds of 10/100/1000 Mbps. By default, all 10/100/1000 Ethernet ports will automatically set themselves up to match the speed of the attached devices.

### Ethernet Ports



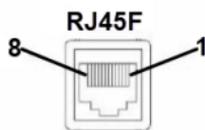
Speed	Colour	Side	Description
1000 Mbps	Green	Left solid	Flashes with activity
100 Mbps	Green	Left solid	Flashes with activity
	Yellow	Right solid	Flashes with activity
10 Mbps	Yellow	Right solid	Flashes with activity

## Connecting the Copper SFP

One Perle 10/100/100 copper SFP has been pre-installed in SFP slot one. The copper SFP is operational or can be removed.

## Connecting Serial Devices

Connect devices, workstations, servers, or routers using a straight-through or rolled serial cable.



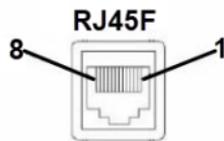
Serial port configured as Straight

Pin #	Signal	Direction
1	CTS	OUT
2	DSR	OUT
3	RX	IN
4	GND	
5	NOT USED	
6	TX	OUT
7	DTR	IN
8	RTS	IN

Serial port configured as Rolled

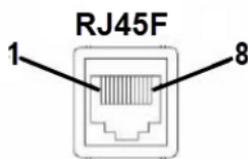
Pin #	Signal	Direction
1	RTS	OUT
2	DTR	OUT
3	TX	OUT
4	GND	
5	DCD	IN
6	RX	IN
7	DSR	IN
8	CTS	IN

## RJ45 Console Port Pinout



Pin #	Signal	Direction
1	RTS	OUT
2	DTR	OUT
3	TX	OUT
4	GND	
5	GND	
6	RX	IN
7	DSR	IN
8	CTS	IN

## RJ45 to RJ45 Cable Pinout



Pinout	
1	----->1
2	----->2
3	----->3
4	----->4
5	----->5
6	----->6
7	----->7
8	----->8

## Connecting USB Devices

The IOLAN USB ports can connect storage devices such as USB flash drives and USB serial devices.