

APL-SW-3 User Manual

Introduction

The APL-SW-3 connects Ethernet networks to the new Ethernet Advanced Physical Layer (APL) interface. The APL-SW-3 can connect up to 3 APL Field Devices to the Ethernet network. When used with a HART to APL interface, such as the ProComSol HART-APL-PCB, existing HART devices can be converted to Ethernet-APL devices. This is especially useful for developing new APL devices from existing HART devices.

System Diagram

The complete HART to APL system consists of a HART transmitter, the APL-SW-3, a 12Vdc power supply, an APL switch, an Ethernet switch, and a host device running a HART-IP compliant App.

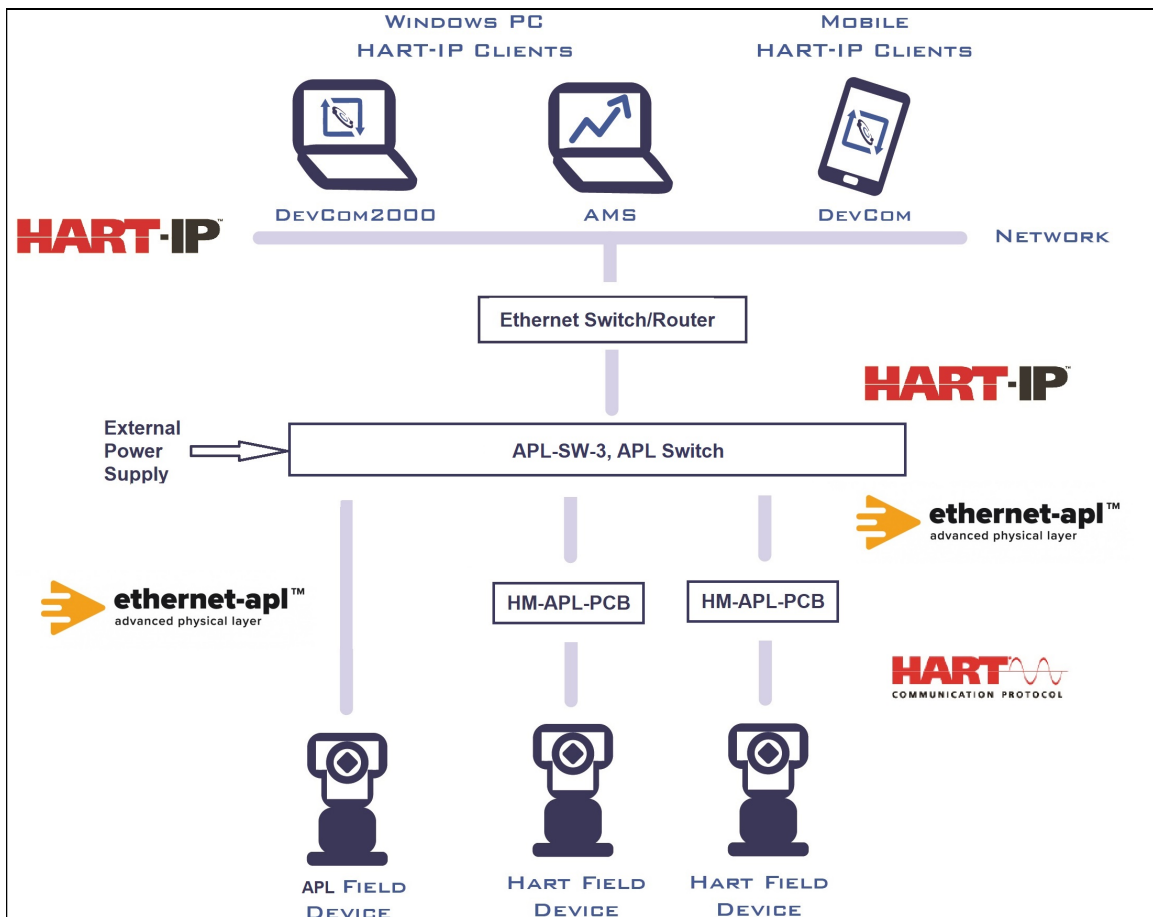
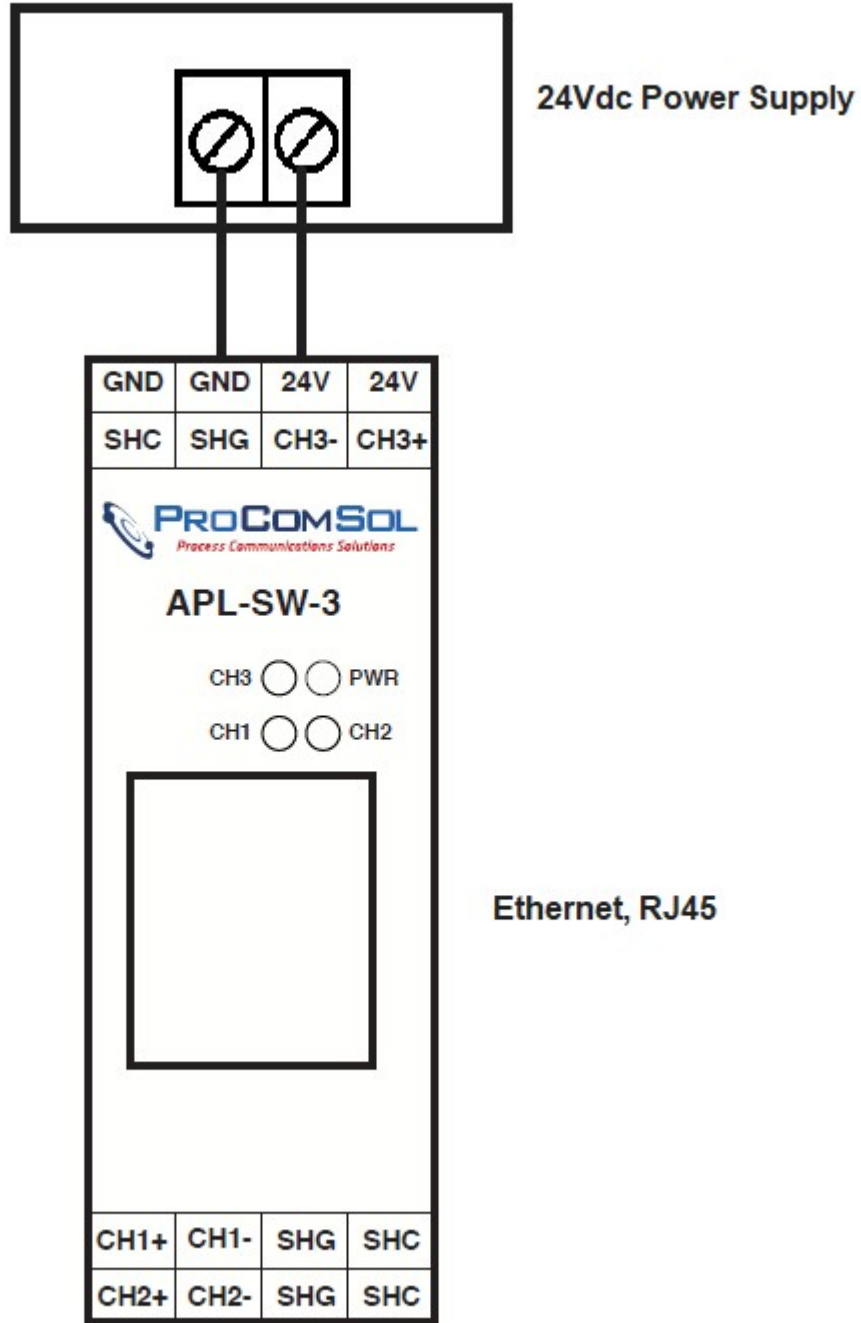


Figure 1. APL-SW-3 System Diagram

APL Connections

APL is a two wire Ethernet physical layer. APL also provides power to the APL Transmitters. Each APL transmitter is connected via a twisted pair cable to a APL switch or gateway. The switch/gateway supplies power to the individual APL transmitters.



Ethernet Addressing

The APL-SW-3 has default setting of a DHCP server enabled. It will appear on the network as 192.168.2.1. This setting can be changed using the Web UI discussed later in this manual.

If you connect the APL-SW-3 directly to your PC's Ethernet port, it should get an IP assigned at 192.168.2.26. As APL devices are added, they appear as 192.168.2.27 (Channel 1), 192.168.2.28 (Channel 2), and 192.168.2.29 (Channel 3).

Note, each time the APL switch is power cycled, the IP addresses may change. The range is 192.168.2.26-31.

Web UI

Launch a browser on your PC and enter 192.168.2.1. The login page will appear. The default login credentials are:

User Name: admin

Password: root

These credentials can be changed.

The Port Status screen shows Link Status and Traffic data.

As mentioned, the default setting of the DHCP server enabled can be set to disabled. You can set a specific IP address or allow the network DHCP server to assign an address.

Step by Step Connection Procedure

1. Connect the APL device to the APL terminals on the APL Switch
2. Apply 24 Vdc power to the APL Switch. This will also power the APL devices.
3. Launch DevCom or some other HART-IP enabled host on a device connected to the same Ethernet network as the APL Switch.
4. Configure DevCom to use TCP/IP (HART-IP).
5. Enter the IP address of the APL channel you wish to communicate on.
6. Poll the network.
7. You should see the APL switch with the APL transmitter listed as a sub device.
8. Tap the APL device.
9. You can now view the APL device using the APL connection. You can edit parameters, run methods, etc.

Warranty

The APL-SW-3 is warranted for 1 year for materials and workmanship. Contact Support at ProComSol, Ltd if having any problems. An RMA (Return Material Authorization) number obtained from ProComSol, Ltd is required on all returned items.

Contact Information**ProComSol, Ltd**

Process Communications Solutions
13001 Athens Ave
Suite 220
Lakewood, OH 44107
USA

Phone: 216.221.1550

Email: sales@procomsol.com
support@procomsol.com

Web: www.procomsol.com