

Installation

This installation guide gives step-by-step instructions about how to install the Express Plus Ethernet Switches: LB9020A-R2

Selecting a Site for the Express Ethernet Switch: LB9020A-R2

As with any electric device, you should place the switch where it will not be subjected to extreme temperatures, humidity, or electromagnetic interference. Specifically, the site you select should meet the following requirements:

- The ambient temperature should be between 32 and 104 degrees Fahrenheit (0 to 40 degrees Celsius).
- The relative humidity should be less than 90 percent, non-condensing.
- Surrounding electrical devices should not exceed the electromagnetic field (RFC) standards for IEC 801-3, Level 2 (3V/M) field strength.
- Make sure that the switch receives adequate ventilation. Do not block the ventilation holes on each side of the switch or the fan exhaust port on the rear of the switch.
- The power outlet should be within 1.8 meters of the switch.

Connecting to Power

☞ Connect the supplied AC power cord to the receptacle on the back of the switch, and then plug it into a standard AC outlet with a voltage range from 100 to 260 Vac.



Figure: Rear view of the switch

Connecting to Your Network

Cabling

- ☞ First, ensure the power of the switch and end devices is turned off.
<NOTE> Always ensure that the power is off before any installation.
- ☞ Prepare cable with corresponding connectors for each type of port in use.
- ☞ Consult Table 2 below for cabling requirements based on connectors and speed.
- ☞ Connect one end of the cable to the switch and the other end to a desired PC or workstation.
- ☞ Once the connections between two end devices are made successfully, turn on the power and the switch is operational.



Cable Length

The maximum distance of a node to a directly connected switch on a 100BASE-TX network is 100 meters with Category 5 shielded twisted-pair (STP) cable or unshielded twisted-pair (UTP) cable. For a 10BASE-T network, it may range up to 100 meters with Category 3, 4, or 5 STP/UTP cable.

The maximum segment distance between a node and a directly connected switch port on a 100BASE-FX network is 75 km using 10/125(or 9/125) μ m single-mode fiber optic cable. It is capable of spanning at most 2 kilometers when use of 62.5/125(or 50/125) μ m multi-mode fiber-optic cable.

Table: Cable Specifications

Ethernet Standards	Connector	Port Speed Half/Full Duplex	Cable	Max. Distance
10BASE-T	RJ-45	10/20 Mbps	Cat. 3, 4 or 5 UTP/STP	100 m
100BASE-TX	RJ-45	100/200 Mbps	Cat. 5 UTP/STP	100 m

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