# Afiberdyne labs 

Fiber Optic Networking Products

## Application Note

## Fiberdyne "Office Ethernet" Switch Compatibility

## Keywords

Application, Ethernet, Switch, compatibility

## Summary

Our switches will work with any other networking equipment, which is compliant with IEEE Standard, 802.3. IEEE Std 802.3 is the primary source for all Ethernet information.

## Scenario

Many customers do not understand the standardization inherent in all Ethernet equipment.

## Question

Will our switches work with equipment, by other manufacturers (e.g. Cisco, 3COM, SMC, Netgear)?

## Notes/Answer

YES! Since all Ethernet equipment is IEEE Std 802.3 compliant, they will work, regardless of supplier. Each supplier may build "additional" features, as an attempt to differentiate their equipment. However, most additional features are actually related to IEEE Std 802.3 or other standards. Given the switches are connected via compatible media (i.e. copper vs. fiber), and given the transmission speeds are equal, then the equipment will work. There is no magic; it is all "plug-and-play."

What are the standard features, which are built into our Office Ethernet switches?

- 10/100Base-TX ports: 10/100 Mbps, Full/Half Duplex operation, auto-negotiate, auto-MDI/MDIX
- Optional fiber-optic port: multimode ST or SC, single-mode SC (up to 20 km )

Note: when the fiber module is installed, the last copper port is disabled.
Note: for greater single-mode distance, use a Fiberdyne "SM40k" media converter

- Fast switching speed, using store-and-forward, non-blocking fabric, wire-speed filtering/forwarding
- Virtual LAN (VLAN) capability: prevent certain segments from accessing certain other segments
- Trunking options: make higher-speed connections (up to 400 Mbps bandwidth) between switches
- QoS (Quality of Service) functionality: tagged Ethernet packets contain VLAN and priority info.
- 19-inch rack-mount hardware included with switch

Note: For network management features, refer to Fiberdyne's Intelligent series of Ethernet Switches.

