

FAST ETHERNET OFFICE SWITCH USER MANUAL

MODELS 502023, 523301,
502054, 523318



Model shown: 502023 5-Port



INTRODUCTION

Thank you for purchasing the INTELLINET NETWORK SOLUTIONS™ Fast Ethernet Office Switch, Model 502023 (5-port with plastic housing), Model 523301 (5-port with metal housing), Model 502054 (8-port with plastic housing) or Model 523318 (8-port with metal housing).

This high-performance switch provides you with the ability to segment network traffic, extend Fast Ethernet connection distance and convert data packets between different transmission speeds. And with the ever-handy Auto MDI/MDI-X function on all ports, you don't need to worry about whether or not the cable is straight or cross-over — just connect to another switch or hub.

No software is needed for installation or maintenance, either, making the Fast Ethernet Office Switch an effective and time-saving solution for incrementally upgrading 10 Mbps switching to 100 Mbps switching for small workgroups or SOHO network users. Plus, full and half duplex modes provide 200 Mbps of bandwidth.

Easy-to-follow instructions in this user manual help make installation of the switch quick and simple, so you'll also soon be enjoying the benefits of these additional features:

- 10/100 auto-sensing ports automatically detect optimal network speeds
- Supports any combination of 10 Mbps or 100 Mbps network devices
- Compact case
- LEDs for Link, Activity
- NWay auto-negotiation
- Non-blocking design
- Store and forward switching architecture
- Lifetime Warranty

FCC STATEMENT

These Fast Ethernet Office Switches have been tested and comply with the limits for a Class B digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used according to the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which is found by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna
2. Increase the separation between the equipment or devices
3. Connect the equipment to an outlet other than the receiver
4. Consult a dealer or an experienced radio/TV technician for assistance.

FRONT/TOP PANEL

The front- or top-panel LED indicators — POWER, Link/Act — allow for more convenient monitoring and troubleshooting of the switch. The table below shows each LED function.

LED	Status	Operation
POWER	Steady green	Power on
	Off	Check AC connection; turn the power on
LINK/ACT	Steady green	Valid port connection
	Blinking green	Valid port connection; data being transmitted/received
	Off	No link established

REAR/SIDE PANEL

Power

Plug the female end of the power adapter firmly into the receptacle (on the rear panel of Models 502023, 523301 and 523318; on the side panel of Model 502054) and the other end into an electrical outlet. Confirm that the power LED is lit for a normal power status. **NOTE:** To ensure proper operation, use only the power adapter included with this switch.



Power adapter jack:
Model 523301 (above);
Model 502054 (left)

Ports

All ports on the Fast Ethernet Office Switch support Auto-MDI/MDI-X functionality, so crossover cables and uplink ports are not needed for connections to PCs, routers, hubs, additional switches or other devices. Cat5/5e UTP/STP cables provide optimal performance; if a status LED corresponding to any of the ports in use doesn't indicate a link or activity, check the connected device for proper setup and operation.



Above: Model 502054; below: Model 523318. Note that only Model 502054 has the power adapter jack on the side panel, as shown on Page 4.



INSTALLATION

Prior to use, it is recommended that the Fast Ethernet Office Switch be placed/positioned:

- on a level surface that can support the weight of the switch (and any other items that need to be considered);
- with a minimum of 25 mm (approx. 1") of clearance on the top and sides for adequate ventilation;
- away from sources of electrical noise, such as radios, transmitters and broadband amplifiers;
- where it cannot be affected by excessive moisture; and
- within 100 m (approx. 328') of network devices it's to be connected to.

SPECIFICATIONS

Standards & Certifications

- IEEE 802.3 10Base-T Ethernet
- IEEE 802.3u 100Base-TX Fast Ethernet
- IEEE802.3x Flow Control and Backpressure
- FCC Class B, CE Mark

General

- Ports:
 - Models 502023 & 523301: 5 10/100 Mbps NWay
 - Models 502054 & 523318: 8 10/100 Mbps NWay
- Cable: Cat3, 4, 5 UTP/STP
- Duplex modes: all ports (up to 200 Mbps)
- Uplink: all ports Auto MDI/MDX (Auto Uplink)
- Protocol: CSMA/CD
- Switch architecture: store and forward switch technology
- Filter/forward rate:
 - 10Base-T: 14,880 pps (packets per second)
 - 100Base-TX: 148,800 pps (packets per second)
- MAC address entries:
 - Models 502023 & 523301: up to 1,000
 - Models 502054 & 523318: up to 2,048
- Buffer size:
 - Model 502023: 48 kBytes
 - Model 502054: 64 kBytes
 - Model 523301: 96 kBytes
 - Model 502054: 96 kBytes

LEDs

- Power
- 10/100 Mbps Link/Activity (1 per port)

Power

- External AC adapter:
 - Models 502023 & 502054: 9 V
 - Models 523301 & 523318: 7.5 V

Environmental

- Operating temperature:
 - Models 502023 & 502054: 0 – 40°C (32 – 104°F)
 - Models 523301 & 523318: 0 – 55°C (32 – 140°F)
- Storage temperature:
 - Models 502023 & 502054: -10 – 65°C (10 – 149°F)
 - Models 523301 & 523318: -20 – 90°C (-4 – 194°F)
- Operating humidity: 10 – 90% RH (non-condensing)
- Housing material:
 - Models 502023 & 502054: plastic
 - Models 523301 & 523318: metal
- Physical size:
 - Models 502023 & 523301: 125 x 72 x 25 mm (5 x 2.8 x 1 in.)
 - Models 523301 & 523301: 130 x 77 x 24 mm (5.1 x 3 x 0.9 in.)

Package Contents

- Fast Ethernet Office Switch
- Power adapter
- User manual



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