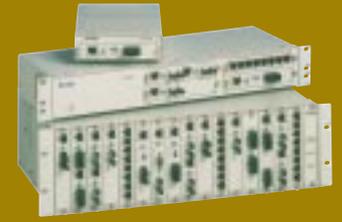# WizLAN Ltd.

5 Port Ethernet Switch
10/100BaseTX and 100BaseFX

WIZ-505/545
Media Wizard Modules

- Optimized for surrounding and daisy chain F/O networks and star topologies
- 100BaseFX fiber ports supporting:
  - Multimode or Single mode fibers up-to 100Km
  - SC, ST, MT-RJ, VF-45 or LC connectors
  - Single fiber versions
- Auto-negotiation 10/100BaseTX RJ-45 ports with MDI-X auto crossover
- Full wire speed and half/full duplex support on all ports
- Far-end-fault detection, flow control, broadcast control
- VLAN support (optional)
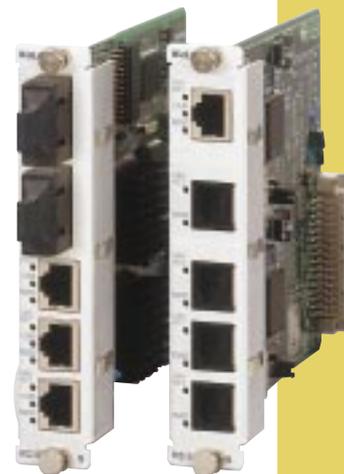- Per port status LED indicators
- Manageable

The WIZ-505/545 F/O switching modules are optimized to address surrounding network applications (ring and daisy-chain topologies) mainly used in monitoring/surveillance systems, and for F/O switching centers using star topology. Installed in the Media Wizard 16, 4 or single slot chassis, the modules provide a flexible solution for any network scale and needs.

The WIZ-505 includes two 100BaseFX and three 10/100BaseT/TX ports while the WIZ-545 includes four 100BaseFX and one 10/100BaseT/TX ports. The 100BaseFX fiber ports are available with a choice of SC, ST, MT-RJ, VF-45 or LC F/O connectors for multimode or singlemode fibers supporting up-to 100Km.

The WIZ-505 is also available in single fiber (/SF) versions, releasing/saving expensive fiber, doubling the utilization. The switching modules deliver powerful features usually found in high-end switches: full wire speed forwarding and filtering on all ports; 1k MAC addresses using automatic learning and aging mechanism; half/full duplex operation with flow control to allow 20/200Mbps bandwidth and minimize packet loss; broadcast storm control; optional port VLAN; 1Mb buffer memory; far-end-fault detection; auto-negotiation and MDI-X auto crossover.

The WIZ-505/545 uses store & forward architecture enabling direct 10M to 100M transfers as well as complete error checking and filtering that optimizes network operation. The switches support long frames of up to 1532 bytes.
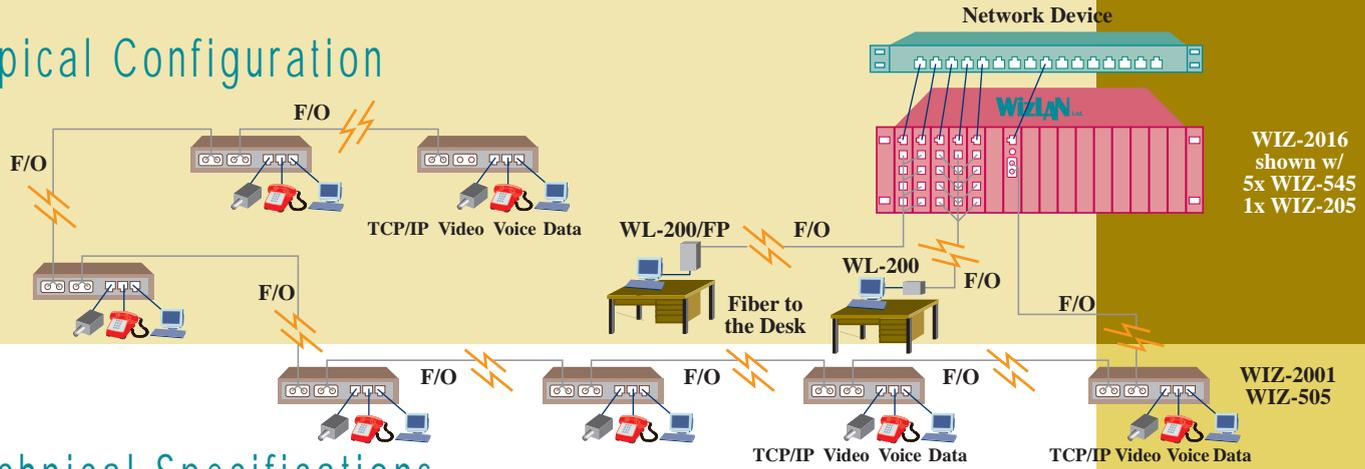
A complete set of LED indicators provides easy monitoring of the status and the activity on each individual port.

WizLAN Ltd. Simply Unbeatable

MEDIA WIZARD

Typical Configuration

Technical Specifications

WIZ-505/545 - Five ports 10/100Mbps Ethernet Switch

100BaseTX Port(s)

10/100BaseTX RJ-45
10/100 auto-negotiation (speed and HDX/FDX)
TX polarity detection
100 meter (330 ft) distance over UTP/STP cable

Special Features

Far-End-Fault detection, on FX port(s)
Flow control and broadcast control
VLAN option

Standards Compliance

IEEE 802.3 - 10Base Ethernet
IEEE 802.3u - 100Base Fast Ethernet
IEEE 802.3 - Auto-negotiation
IEEE 802.3x - Flow control
IEEE 802.3p - Priority

LED Indicators (per port)

10/100BaseTX PORT(s)	LNK/ACT - Link/Activity
	FD/CO - Full Duplex/Collision
	100M - 100Mbps speed
100BaseFX PORT(s)	LNK/ACT - Link/Activity
	FD/CO - Full Duplex/Collision

Environment

	˚C	˚F
Operating Temperature	0 to 45	32 to 113
Storage Temperature	-30 to 65	-22 to 149
Humidity	10 to 90% non-condensing	

100BaseFX port(s)

• Interface		
Multimode	1300nm	SC, ST, MT-RJ, VF-45, LC
Singlemode	1300nm	SC, MT-RJ, LC
	1550nm	SC

• Distance/Power Budget		
Multimode	62.5/125µ	6Km (11dB budget)
Singlemode	9/125µ	20km 40Km 60km 100Km
Min power budget		11dB 21dB 31dB 32dB

• Single Fiber Distance/Power Budget		
Singlemode	9/125µ	35Km 80Km
Min power budget		18dB 26dB

Electrical Characteristics
(Installed in WIZ-2016/2004/2001 Chassis)

Chassis main Input Voltage	90 - 240 VAC or -48 VDC
Frequency	47 - 400 Hz
DC Power Consumption (PU)	WIZ-505 - 1.6 PU
(Power Units per module)	WIZ-545 - 2.0 PU

Physical Dimensions (Module)

Height	Width	Depth
130mm (5.1")	25.4mm (1")	140mm (5.5")

Safety & Emissions

CE, FCC Part 15, EM60950

Switching Method

Store and forward, learning & aging

Ordering Information

WIZ-505M/[x]	5 port switch, 2 ports 100BaseFX (MM, 1300nm, 0-6Km,[x]), 3x 10/100BaseTX RJ-45 ports, status mgmt
WIZ-505[Sn]/[x]	5 port switch, 2 ports 100BaseFX (SM, [Sn],[x]), 3x 10/100BaseTX RJ-45 ports, status mgmt
WIZ-505/SF/[Sn]/[x] †	5 port switch, 2 Single fiber ports 100BaseFX (SM, [Sn],[x]), 3x 10/100BaseTX RJ-45 ports, status mgmt
WIZ-545M/[x]*	5 port switch, 4 ports 100BaseFX (MM, 1300nm, 0-6Km,[x]), 1x 10/100BaseTX RJ-45 ports, status mgmt
WIZ-545[Sn]/[x]*	5 port switch, 4 ports 100BaseFX (SM, [Sn],[x]), 1x 10/100BaseTX RJ-45 ports, status mgmt
	* = only available with VF-45, MT-RJ or LC connectors

M	Multimode 1300nm 0-6Km	[x]= Type of F/O connector: ST, SC, VF-45, MT-RJ or LC
[Sn]=S	Singlemode 1300nm 0-20Km	[x]= Type of F/O connector: SC, MT-RJ , LC
[Sn]=S1	Singlemode 1300nm 10-40Km	[x]= Type of F/O connector: SC
[Sn]=S2	Singlemode 1300nm 30-60Km	[x]= Type of F/O connector: SC
[Sn]=S3	Singlemode 1550nm 50-100Km	[x]= Type of F/O connector: SC
† Single fiber:		
SF/[Sn]=S1	Single Fiber SM 1300nm 0-35Km	[x]= Type of F/O connector: SC or FC - APC polish
SF/[Sn]=S2	Single Fiber SM 1550nm 20-80Km	[x]= Type of F/O connector: SC or FC - APC polish