How auto-negotiation works

IEEE 802.3 NWay Auto-negotiation is a data communications protocol used with Ethernet switches, routers and media converters. The NWay protocol was developed so Ethernet devices, which support multiple transmission speeds such as a 10/100, can operate more efficiently. This protocol automatically selects the highest possible common transmission speed between two Ethernet switches, routers or media converters and automatically sets that speed on the port.

Benefits of using NWay Auto-negotiation (also referred to as auto-sensing or auto-negotiation) include:
- Network connections that automatically choose the highest performance levels without the need for costly and time consuming manual port configurations.
- Guaranteed network uptime and resiliency. If the NWay protocol detects that a device that is being attached is not of the same technology (i.e. Token Ring to Ethernet connection) the port will not allow a connection or data transfer saving the network from potentially catastrophic downtime.
- NWay Auto-negotiation is backward compatible with 10 Mbps only Ethernet devices.

Unicom’s Unmanaged 10/100 Mbps Ethernet Switches - 5 or 8 RJ45 Ports

The Mini-Switch 5 and 8 are super compact 10/100Base-TX switches. These parts represent the newest generation in Ethernet switching technology by supporting both 10 and 100 Mbps speeds, half or full-duplex transmission modes and auto MDI/MDIX crossover checking. Units include a 9 VDC power supply.

- **GEP22000S-L**
  - Unit 5 Port 10/100 Mbps Unmanaged Ethernet Switch
  - List Price: 25.00

- **GEP22100L-L**
  - Unit 6 Port 10/100 Mbps Unmanaged Ethernet Switch
  - List Price: 30.00

Unicom’s Unmanaged 10/100 Mbps Ethernet Switches - 16 or 24 Ports

Unicom’s Dyna-Switch Series 16 and 24 port unmanaged Ethernet switches are an affordable and efficient way to upgrade a network. With sixteen or twenty-four 10/100 Mbps ports with MDI/MDIX, these switches will fit neatly on a desktop or can be rack mounted with the included mounting brackets. With full duplex operation, the switches can increase the bandwidth of the 10 Mbps Ethernet port and the 100 Mbps fast Ethernet port to 20 Mbps and 200 Mbps, respectively. This switch supports IEEE 802.3 full-duplex flow control and half-duplex backpressure congestion control.

- **GEP22100L-L**
  - GBIC SFP Transceiver, 1000LX, LC, Single mode, 10km
  - List Price: 199.00

- **GEP22000S-L**
  - GBIC SFP Transceiver, 1000SX, LC, Multimode, 500m
  - List Price: 99.00

Unicom DynaGST 24 Port Gigabit Switch with SFP slots

The DynaGST 24/2Gigabit Ethernet switches are an ideal solution for solving traffic congestion at the core of the network. They offer auto-negotiating 10/100/1000Base-T Gigabit Ethernet ports that can significantly improve your network backbone performance. The DynaGST switches provide two mini GBIC Gigabit slots for Gigabit speed network connections. The DynaGST Gigabit Ethernet switches feature an Auto MDI/MDIX function for each port and support store-and-forward switching.

- **GEP33224T-1**
  - 24 Port 10/100/1000Base-T with Two Slots for SFP (Mini) GBICs
  - List Price: 429.00

- **GEP22000S-L**
  - GBIC SFP Transceiver, 1000SX, LC, Multimode, 500m
  - List Price: 99.00

- **GEP22100L-L**
  - GBIC SFP Transceiver, 1000LX, LC, Single mode, 10km
  - List Price: 199.00

Unicom 24 Port 10/100/1000Base-T Managed Switch with 4 SFP Slots

Unicom’s SmartGST-24/4GM managed switch is the newest generation of fast Ethernet switching technology. Twenty-four 10/100/1000Base-T auto sensing, auto MDI/MDIX ports provide a completely flexible high-performance non-blocking full wire speed solution. Enhanced by its many features including SFP GBIC ports, VLAN tagging, port trunking, spanning tree, and broadcast storm filters, this switch is an ideal solution for campus and enterprise networks.

- **GEP66424T**
  - 24 Port 10/100/1000Base-T Managed Switch with 4 SFP Slots
  - List Price: 479.00

- **GEP22000S-L**
  - GBIC SFP Transceiver, 1000SX, LC, Multimode, 500m
  - List Price: 99.00

- **GEP22100L-L**
  - GBIC SFP Transceiver, 1000LX, LC, Single mode, 10km
  - List Price: 199.00

Unicom 8 Port 10/100 Managed Switch with 1000Base-T Port and SFP Slot

Unicom’s SmartGST-900M managed switch is the newest generation of fast Ethernet switching technology. Eight 10/100Base-TX auto sensing, auto MDI/MDIX ports provide a completely flexible high-performance non-blocking full wire speed solution. Enhanced by its many features including one SFP GBIC port, one 1000Base-T port, VLAN tagging, port trunking, spanning tree, and broadcast storm filters, this switch is an ideal solution for campus and enterprise networks. The SmartGST-900M management features also include port-based, dynamic and static VLANs, GVRP, IGMP Snooping, port mirroring and port security. The SFP GBIC and 1000Base-T port offer high-speed long haul connections that eliminate bottlenecks to create the ideal backbone.

- **GEP33109T**
  - 8 Port 10/100 Managed Switch with 1000Base-T Port and SFP Slot
  - List Price: 329.00

- **GEP22000S-L**
  - GBIC SFP Transceiver, 1000SX, LC, Multimode, 500m
  - List Price: 99.00

- **GEP22100L-L**
  - GBIC SFP Transceiver, 1000LX, LC, Single mode, 10km
  - List Price: 199.00