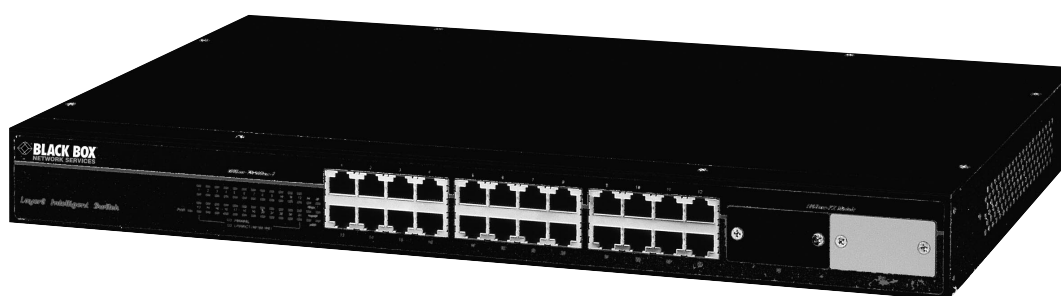# BLACK BOX®
## NETWORK SERVICES

# Managed Layer 3 Ethernet Switch



## Key Features

▶ All the 10/100 Mbps TX ports support Half-Duplex and Full-Duplex modes, Auto-Negotiation and automatic polarity detection.

▶ The optional 100Mbps fiber ports are shared with ports 12 and 24 of 10/100Mbps TX ports respectively.

▶ A RS-232 Console port for easy configuration setting

▶ Provides Flow-Control mechanism to ensure zero packet loss. Uses Back-Pressure for Half-Duplex operation, and IEEE802.3x for Full-Duplex operation.

▶ Provides Store-and-Forward forwarding scheme.

▶ Provides Aging Time setting.

▶ Provides Port Mirror function.

▶ Provides Port communication mode configuration.

▶ Supports 256 Port-Based VLAN groups as in IEEE 802.1Q. Each VLAN can have an ID with range 1 to 4094

▶ Provides Link Aggregation function. The configurations are flexible. Consecutive combinations of 2, 4 or 8 ports can be bundled into Link Aggregation sets.

▶ Supports GVRP protocol for VLAN configuration.

▶ Provides multicast filtering function.

▶ Provides GMRP for configuration of multicast groups.

▶ Provides Layer3 IP Routing function RIPv1/V2, OSPFV2, DVNRP.

Black Box present its latest cutting-edge backbone Gigabit Intelligent Switch series, the LBS1326AE, providing VLAN, Trunking, Port Mirror, SNMP, RMON, IP Routing and Web management features. The LBS1326AE is the only switch you need for a perfect backbone connection with IP Routing function.

### Performance and Flexibility
With wirespeed Layer 2 switching and wirespeed Layer 3 IP routing on all ports, the LBS1326AE is designed for high-performance desktop connectivity, workgroup and server farm aggregation or backbone applications. The LBS1326AE Layer 3 switch delivers 24 ports 10/100Mbps whereby two port can be used as 100Mbps fiber uplinks. On the backside of the unit is a slot for a two port Gigabit module. The Gigabit module can be 1000BASE-T, 1000BASE-SX, 1000BASE-LX or a mix of copper and fiber.

### IP switching support
The switch includes Layer 3 IP Static Routing, RIP, RIPv2, DVMRP and OSPFv2 routing protocols. By using these protocols, the LBS1326AE can easily be integrated into complex networks.

### Rich Feature Set
Advanced switching features such as IEEE 802.1Q VLAN Tagging, IGMPv2, and 802.1p Traffic Prioritization, port trunking, port security, MAC address filtering or IP address filtering are port of the standard software.

## Specifications

**Standards —**
- IEEE 802.3: 10BASE-T
- IEEE 802.3u: 100BASE-TX
- IEEE802.3ab: 1000BASE-T
- IEEE802.3z: 1000BASE-SX
- IEEE 802.3x: Flow-Control for Full-Duplex operation
- IEEE802.1d: Spanning tree
- IEEE802.1Q: VLAN (256)
- IEEE802.1p: Traffic priorization (2Q)

**Ports —**
- 24 ports 10/100Mbps TX
- 1 or 2 port(s) 100Mbps FX (Optional)
- 1 or 2 port(s) Giga Module (Optional)

**Media Support —**
- 10BASE-T: Category 3, 4 or 5 TP
- 100BASE-TX/1000BASE-T: Category 5 TP
- 100BASE-FX/1000BASE-SX: MM 50, 6525/125µm
- 100BASE-FX/1000BASE-LX: SM, 9/125µm

**Bandwidth —**
- 10BASE-T: 20/10Mbps
- 100BASE-TX: 200/100Mbps
- 1000BASE-T: 2000Mbps

**Forwarding/Filtering Rate —**
- 1488000 packets/second per port @ 1000Mbps, maximum
- 148800 packets/second per port @ 100Mbps, maximum
- 14880 packets/second per port @ 10Mbps, maximum

**Latency —**
- 11 µsec @100Mbps, minimum
- 75 µsec @ 10Mbps, minimum

**MAC Addresses —**
32K entries maximum, Self-Learning

**IP Address —**
64K entries maximum, Self-Learning

**Buffer Memory —** 4 M byte

**Configuration Interface —**
Console RS-232 DCE 19200bps (default)

**Duplex Modes —**
- TP ports provide 100/10Mbps Full/Half-Duplex Auto-Negotiation function
- Fiber ports set to Half or Forced Full-Duplex mode via console port

**LED Indicators —** One (1) for PWR
- For port 1 to 24:
  One (1) per port for FDX / COL
  One (1) per port for LINK / ACT
  (100M or 10M)
- For port 25,26 (Gigabit Module):
  One (1) per port for RXACT
  One (1) per port for TXACT
  One (1) per port for LINK

**Power Supply —**
- Internal full range Auto-Switching
- Input voltage: 100 ~ 240 +/-10%V AC/ 50 ~ 60 Hz

**Power Consumption —**
52.9 watt maximum

**Environment —**
*Operating Temperature:* 0 ~ 45°C
*Storage Temperature:* -20 ~ 70°C
*Humidity:* 10% ~ 90% non-condensing

**Dimensions —** 442 x 255 x 44 mm

## Black Box Network Services - The world's largest network services company

We are, with 25 years of experience, the world leader in network infrastructure services.

**On the Phone —** no charge, answer calls in less than 20 secounds, find the right product with our technical experts.

**On-site —** superior design and engineering, Certified installations, end-to-end service.

**On-line —** receive technical knowledge on-line, including technology overviews, Black Box Explains and the Knowledge Box.

**Most comprehensive TECHNICAL SUPPORT —** our best Product! Free hotline TECH SUPPORT!

**The world's best customer service —** Custom design services and products, the best warranties, money-saving discount programs.

**BLACK BOX exclusives —**
Certification Plus. Guaranted-for-life products and services.