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BLACK BOX[®]

NETWORK SERVICES

DS 11 Series Wireless Ethernet



*Link multiple remote sites to
a central server without cables!*

Key Features

- ▶ Optimised for outdoor point-to-multipoint applications.
- ▶ Architecture supports maximum reliability and range—up to 5 km at 11 Mbps (ETSI allowed power levels).
- ▶ Direct Sequence Spread Spectrum radio technology.
- ▶ Dynamic output power range for maximum distances in all regulatory domains (-4 dBm to 24 dBm).
- ▶ Secure communications using RC4 40-bit key Wired Equivalent Privacy (WEP) encryption.
- ▶ IEEE 802.11b and 802.3 compatible.
- ▶ Includes user-friendly configuration and management utility.

Point to Point and Multipoint solutions

Connect remote office networks across the street or across town with the BLACK BOX[®] DS 11 Series Wireless Ethernet Base Units and Remote Bridges. Their unique architecture provides unprecedented range and capacity for wireless point-to-point or point-to-multipoint connections in outdoor applications.

Easy to install, configure and manage, the units send signals across the unlicensed radio spectrum and offer low ownership costs. What's more, they're fast and reliable in all seasons! The DS 11 Series supports network link speeds up to 11 Mbps and distances of up to 10 kilometres.

Integrated or external antenna options.

The DS 11 Series Wireless Ethernet solution includes a base unit and one or more remote bridges. Both base unit and the remote bridge packages include an indoor LAN interface/power supply unit and an outdoor unit.

You can order the outdoor units with

integrated antennas on their front covers or with RF connectors, which you use to attach one or two external antennas. (Call Tech Support for a list of antenna options, including omnidirectional units for point-to-multipoint setup, and to discuss what equipment is approved in your area.)

Use the DS 11 Base Unit to link a central site to up to 128 remote sites and connect it directly to your Ethernet network using 10BASE-T RJ-45 connectors.

The DS 11 Series Wireless Ethernet features an advanced security architecture to prevent eavesdroppers and hackers from accessing your wireless network. It has Wired Equivalent Privacy (WEP) capabilities that use an RC4 encryption algorithm with a 40-bit key (as defined in the IEEE 802.11 standard). Your users will not only benefit from high-performance connectivity, but they can also transfer data at privacy levels equivalent to those of wired systems.



#24114

Specifications

Radio:

Distance (Maximum) — ETSI (20 dBm EIRP): 10 km

Frequency Range — 2.4–2.4835 GHz ISM band (ETSI)

Integrated Antenna Type — Flat-panel 16 dBi, 20° vertical/horizontal

Output Power — At the antenna port: ETSI: -4, -2, 4, 6, 12, 14 dBm

Processing Gain — 10.4 dB nominal

Radio Type — Direct Sequence Spread Spectrum

Security — 40-bit WEP authentication and data encryption

Selectable Subchannels — ETSI 1–13

Sensitivity (BER 1E10-6) — Data rate:

1–2, 5.5, 11 Mbps;

Sensitivity: -85, -88, -90, -93 dBm;

Modulation: 256 CCK, 16 CCK, DQPSK, DBPSK

Wireless LAN Standards — Compliant with IEEE 802.11b HR (5.5 and 11 Mbps); Wi-Fi compliant

General:

Management — Utility: SNMP-based enhanced (Windows® 95/98, Windows 2000, Windows NT®)

configuration utility with integrated site-survey tool;

SNMP agents: MIB II, bridge MIB, DS 11 private MIBs;

Software agents: Simultaneous multiunit software upgrade using configurations utility's TFTP download

Connectors — RF (antenna) connector on outdoor units: N-type jack, lightning

protected;

Baseband: Outdoor units: Shielded RJ-45 with special

waterproof sealed cap; Indoor units: Shielded RJ-45;

Ethernet: 10BASE-T (RJ-45)

Operating Humidity — 5% to 95% noncondensing; outdoor units are weather protected

Operating Temperature — Outdoor units: -40 to +55° C;

LAN interface/power supply units: 0 to 40° C

Indicators — LEDs: LAN interface/power supply units:

Power, End-to-End Ethernet Status;

Outdoor units: Power Status, Ethernet

Status/Traffic,

Wireless Link Status/ Traffic, 10-LED display bar

(RSSI in LW2001A-UK, LW2003A-UK; Load

Gauge

in LW2005A-UK, LW2007A-UK)

Power — Consumption: 110/220 VAC; 500/250 mA

Size — LW2001A-UK, LW2005A-UK outdoor units:

30H x 30W x 7.2D cm;

LW2003A-UK, LW2007A-UK outdoor units:

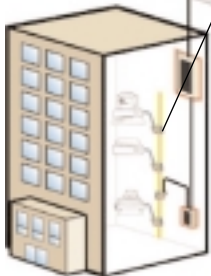
30.5H x 12W x 5D cm;

LAN interface/power supply units: 15.4H x 8.4W x 5.6D cm

Workstation/CPU/printer

Workstation/CPU/printer

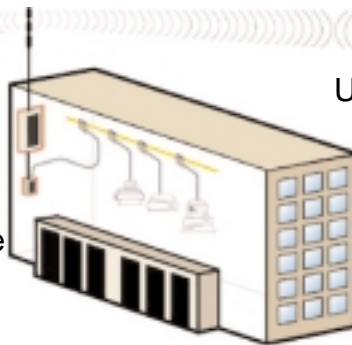
Remote Site



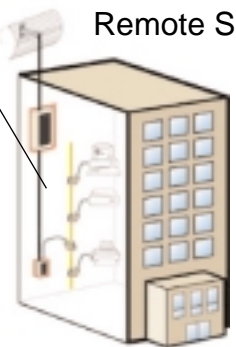
Up to 10km

Up to 10km

Central Site



Remote Site



DS 11 Series Remote Bridge (LW2003A-UK)

DS 11 Series Base Unit (LW2001A-UK)

DS 11 Series Remote Bridge (LW2003A-UK)

Ordering Information

Item	Code
DS 11 Series Wireless Ethernet	
DS 11 Series Base Unit with Integrated 16-dBi Antenna	LW2005A-UK
DS 11 Series Base Unit with Detached Antenna	LW2007A-UK
DS 11 Series Remote Bridge with Integrated 16-dBi Antenna	LW2001A-UK
DS 11 Series Remote Bridge for Use with Detached Antenna	LW2003A-UK

If you've ordered the LW2007A-UK or LW2003A-UK, you need a detached antenna.

