

## CSU/DSU MS DBU



Re-establish your data link fast—get fail-safe DDS backup with our modular CSU/DSU MS base unit and its various backup modules.

## FEATURES

- Supports DDS rates from 2.4 to 64 kbps.
- Three backup line module options.
- Control port provides SLIP and async PPP access to VT100™ terminal emulation.

## OVERVIEW

The cost of Digital Data Service (DDS) lines has been steadily decreasing and is now comparable to the cost of leased analog lines. But DDS has two distinct advantages over analog service: Data moves at higher speeds, enabling transmission of larger volumes; and data error rates are greatly reduced.

If you are making the decision to switch from analog to DDS, or if you want to expand the capabilities you now have with DDS, consider our CSU/DSU MS DBU. Typically, this CSU/DSU replaces a modem in a network and supports speeds up to 64 kbps (sync) or 57.6 kbps (async).

While DDS lines rarely fail, the optional V.34 Modem Module (MOV3298426) provides the CSU/DSU MS DBU with automatic dial backup to quickly re-establish data links.

You can use our CSU/DSU MS DBU to transmit large volumes of data. It also supports a secondary async channel that enables you to piggyback data up to 2400 bps (this service must also be supported by your local telephone company).

Making the move from analog to digital doesn't mean replacing all your DTE devices with "fast" equipment designed for digital. The CSU/DSU MS DBU has a DTE rate-matching feature that allows your slower DTEs to communicate over higher-speed digital lines (56-kbps only).

The CSU/DSU MS DBU has a wide receiver range, from 0 to -45 dBm at 56-kbps loop rate, so you can transmit data over loops up to 18,000 feet (5486.4 m) long via 26 AWG wire.

### Technically Speaking

- Digital Data Service (DDS) is a wide-bandwidth, private leased line that transmits data in digital, rather than analog, format. DDS lines are 4-wire circuits (transmit pair, receive pair) linked by special repeaters and separated from conventional analog lines. They can provide a higher data-transmission rate and maintain a higher level of data integrity than analog transmission service.
- DDS is a nationwide service of AT&T® that enables inter-connection and transport of data for the regional Bell operating companies. The telephone companies provide a DDS-compatible service within their region and provide the local loop service to DDS customers.
- Accunet® Switched 56 is a dialup DDS offered by AT&T that allows you to pay for data transfer only when the unit is active. Regional Bell operating companies provide the local loop service to Switched 56 customers. SPRINT 56 is a Switched 56 service supplied by Sprint®.
- An Integrated Service Unit (ISU) replaces the modem in a network. A combination of the Channel Service Unit (CSU) and the Data Service Unit (DSU), it is usually called a CSU/DSU.
- The CSU/DSU MS DBU supports sync speeds of 2.4, 4.8, 9.6, 19.2, 38.4, 57.6, and 64 kbps. It supports async speeds of 2.4, 4.8, 9.6, 19.2, 38.4, and 57.6 kbps.
- Front-panel controls are used for configuration and testing. The CSU/DSU MS DBU can generate and monitor either of two industry-standard test patterns during selected tests, and report the number of errors on a front-panel display. The unit will also respond to standard DSU and CSU loopback commands from the telephone company central office or DDS/V.54 commands from a remote CSU/DSU MS DBU.
- Seven LEDs show the status of the DTE interface leads. For a complete listing, see the specifications on **page 3**.
- Three data DTE connectors on the rear panel provide a primary channel V.35 or RS-232 port, and a secondary channel RS-232 port. In Switched 56 operation, the secondary channel is used for control.
- DDS or Switched 56 can be selected on power-up and during self-testing.

*NOTE: Use only a grounded, 115-VAC, 60-Hz receptacle.*

## TECH SPECS

### Clocking —

Channel port: Internal, external, invert clocking;  
Network port: Master or network timing

### Diagnostics —

Network: CSU and DSU loopbacks;  
Test patterns: 2047, 511, DDS stress patterns 1–4;  
User: Local DTE and loop, remote V.54

### Line Type — DDS

### Operation — Full-duplex

### Speed —

Sync: 2400, 4800, and 9600 bps; 19.2, 38.4, 56, and 64 kbps;  
Async: 2400, 4800, and 9600 bps; 19.2, 38.4, and 57.6 kbps

### Connectors —

Data ports: (1) DB25 F (RS-232 DCE), (1) M/34 F (V.35 DCE);  
Line: (2) RJ-48 ([1] telco, [1] control);  
Expansion: (1) for backup module, (1) for access module

### Indicators — (7) LEDs: RS, CS, TD, RD, CD, ALM, and TST

### Power — 115 VAC, 60 Hz, 7 watts

### Size — 2.4"H x 8"W x 10.4"D (6.1 x 20.3 x 26.4 cm)



MT136A



MT136A: rear view

## TYPICAL APPLICATION

Use the CSU/DSU MS DBU for routing and bridging, SNA/SDLC systems, high-speed asynchronous systems, Frame Relay networks, and with stat mux links. It's versatile for a variety of deployments!

## WHAT'S INCLUDED

- ◆ CSU/DSU MS DBU
- ◆ 6-ft. (1.8-m) RJ-45 to RJ-45 straight cable
- ◆ DB25 female adapter
- ◆ User's manual

Item	Code
CSU/DSU MS DBU	MT136A
For a backup line, order one of the following modules...	
V.34 Modem	MOV3298426
ISDN	MT139C

## Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

### Recognize any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.
- You don't have a purchase order number and the tech refuses to help you.
- It's 9 p. m. and you need help, but your vendor's tech support line is closed.

According to a survey by Data Communications magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.