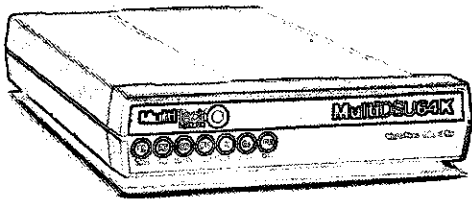


# MultiDSU™



## Models and Description:

- MT56DSU2 - Multi-rate DSU/CSU for 56K bps or sub-rate (19.2K, 9600, 4800, or 2400 bps) digital service.
- MT64DSU - DSU/CSU for 56K bps or 64K bps (DS-0) digital service.

## General Description:

Combined DSU and CSU for 56K, 64K, or sub-rate digital service.

MultiDSU™ products offer the combined circuitry of a data service unit (DSU) and channel service unit (CSU) for both dedicated and switched digital services.

The MultiDSU64K™ (model MT64DSU) connects to 56K or 64K service via a 2-wire or 4-wire, switched or dedicated digital link, supports sync or async operation, and configures for a point-to-point or multi-point network installation. Inputs may range from 9600 to 64K bps, as the MT64DSU provides the speed conversion necessary to interface with the 56K or 64K bps network line.

The MT64DSU supports AT dialing for async mode, DTR dialing for async or sync mode, or V.25bis dialing for sync mode. It accepts sync input at 9.6K, 19.2K, 56K or 64K bps or async input at 9.6K, 19.2K, 38.4K, or 57.6K bps and transmits across a 2- or 4-wire "Switched 56", 4-wire 56K, or "64K Clear Channel" digital service (speed conversion is handled by the DSU circuitry).

The MultiDSU56K™ (model MT56DSU2) connects to a 56K or sub-rate service (i.e., 2400 to 56K bps service), supports sync or async operation, and configures for a point-to-point or multi-point network installation. Input to the MT56DSU2 must match the line speed of the digital network service (i.e., to operate over a 19.2K digital service, the DTE must have a baud rate of 19.2K bps).

The MT56DSU2 accepts sync input at 2.4K, 4.8K, 9.6K, 19.2K, or 56K bps or async input at 2.4K, 4.8K, 9.6K, or 19.2K bps and transmits across a 4-wire 2.4K, 4.8K, 9.6K, 19.2K, or 56K bps digital line.

Each model provides an RS232C DCE interface and a V.35 DCE interface for sync or async equipment.

## Features:

Direct DDS\* connection, various sync and async input speeds, multi-rate operation, plus user-selectable features.

### DATAPHONE® Digital Service (DDS) Ready

- The MultiDSU models comply with the data format conversion, line conditioning, and termination requirements of AT&T® Pubs 41450 and 62310 for direct DDS connection.

### Multi-rate Operation

- The MT56DSU2 accepts sync or async input and interfaces with DDS network lines of varying speeds (i.e., 2.4K, 4.8K, 9.6K, 19.2K, or 56K bps subscriptions).

### DSU Speed Conversion

- The MT64DSU accepts sync or async input and interfaces with Switched 56, dedicated 56K, or 64K Clear Channel DDS network lines (i.e., 56K or 64K bps subscriptions only).
- The MT64DSU performs the speed conversion necessary to interface the sub-rate input speeds with DDS network speeds.

### Built-in Features

- Automatic rate detection.
- Point-to-point and multi-point operation.
- Anti-streaming, elastic store (for analog off-net extensions), system status, and circuit assurance.
- Loopback and test-pattern diagnostics.

### User-selectable Features

- RS232C or V.35 DCE interface to the user equipment.
- External, Internal, or DDS (slave) clocking.
- RTS and DSR signal "forced on" options.

## Specifications:

Dimensions: 1.38" x 6.15" x 9.00"  
3.5 cm x 15.6 cm x 22.9 cm

Weight: 2.7 lbs (1.2 kg) w/ Xfmr  
2.0 lbs (0.9 kg) w/out Xfmr

LEDs: SD (Transmit), RD (Receiver), CD (Carrier), Network data rates, CTS (Clear), RTS (Request), NS (No Signal), OOS (Outage), TM (Test Mode)

Input Rates: Sync - 2.4K, 4.8K, (MT56DSU2 only) 9.6K, 19.2K, & 56K bps (both models) 64K bps (MT64DSU only)  
Async - 2.4K, 4.8K, (MT56DSU2 only) 9.6K, & 19.2K bps (both models) 38.4K & 57.6K bps (MT64DSU only)

SOC Code: Part 68 FCC Registration Number AU7USA-18883-DE-N

Connectors: DB25F (female) for RS232C DCE  
34-pin (female) for V.35 DCE  
RJ48S (8-pin female) keyed jack for DDS network

Power Usage: 117V AC, 50-60 Hz, 10 Watts

Temperature: 32° to 120° F (0° to 50° C)

Humidity: 95% (non-condensing)

Certification: FCC Part 15 Class A, FCC Part 68, UL Listed, AT&T Pubs 62310 & 41450

MT56DSU2 04DU5-24 (2.4K bps interface)

FIC/NIC: 04DU5-48 (4.8K bps interface)

04DU5-96 (9.6K bps interface)

04DU5-19 (19.2K bps interface)

04DU5-56 (56K bps interface)

MT64DSU 04DU5-56 (56K bps interface)

FIC/NIC: 04DU5-64 (64K bps interface)

USOC Jack: RJ48S (Keyed)

Modulation: bipolar return to zero

Transmit Level: 1.4v peak (+6dBm) into 135 ohms at 2.4K, 4.8K, 19.2K, 56K, and 64K bps  
0.7 peak (0 dBm) into 135 ohms at 9.6K bps

Impedance: 135 ohms input and output

Receive Levels: 6 to -40 dBm at 2.4K & 4.8K bps

0 to -40 dBm at 9.6K bps

6 to -40 dBm 19.2K bps

6 to -45 dBm 56K & 64K bps

Delay Times: 

	RTS/CTS	DCD on	DCD off
2.4K	8.1	7.5	7.0
4.8K	4.3	2.6	3.5
9.6K	2.2	1.6	1.5
19.2K	1.0	0.8	0.7
56K/64K	0.4	0.3	0.2

# MultiTech® Systems

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