



FEATURES: Editing • Buffered Transmission • Extended Formatting Capabilities • Block and Character Transmission • Buffered Auxiliary Port • Extended Function Keys

The DM20 is a microprocessor controlled buffered video display terminal with editing and other enhancements to address both interactive and batch mode markets.

It finds applications where data transmission can be selectively designed as conversational, line, message page. Operational characteristics are enhanced by the addition of local and line monitor modes. The forms mode allows the operator to prepare a form with specific visual and logical attributes on the display screen, and then transmit it to a host computer or auxiliary device.

multi-function
smart
terminal



**MODEL
DM20**

**MODEL
DM2S**

OEM CUSTOMIZATION

The DM2S is a DM20 with socket provision for OEM applications.

The DM 'S' Series offers as standard both synchronous and asynchronous I/O capability.

For those applications similar to the DM20 that require special protocols (firmware), the DM2S is your answer. You may develop your own firmware or have it developed by Beehive.

SPECIFICATIONS

DISPLAY FORMAT

24 lines x 80 characters

STATUS LINE

25th line of display

CRT SIZE

12" measured diagonally

CHARACTER SIZE

Approximately 0.2" high x 0.1" wide

CHARACTER TYPE (Alphanumeric)

128 displayable ASCII characters, each formed within an 8 x 8 dot matrix. Descenders on lower case characters.

CHARACTER TYPE (Line Drawing)

Eleven graphic symbols for drawing forms and contiguous lines

CHARACTER GENERATION

MOS ROM

REFRESH RATE

50 Hz — 60 Hz (Programmable)

CHARACTER DISPLAY

Light characters on a dark background or dark characters on a light background (switch selectable)

VISUAL ATTRIBUTES

Normal, Reverse, Blink, Underline, Half Intensity, and Security Fields

LOGICAL ATTRIBUTES

Protected, numeric only, modified data transmission, Must Fill, Total Fill, Constants

TABULATION/BACKTAB

Fixed tab stops occur each eight character positions

CURSOR

Non-destructive blinking block

MEMORY LOCK

The display area above the line the cursor is currently on is frozen on the screen

LINE LOCK

The host CPU may selectively designate reserved display lines

MEMORY ADDRESS POINTER

An invisible cursor that is used to read and write to and from the display memory independent of visible screen functions

CURSOR CONTROL

Up, down, left, right, home, carriage return, line feed

CURSOR SENSE

Cursor position is transmitted to the host upon request

CURSOR ADDRESSING

Direct X-Y cursor positioning by line and column

MEMORY POINTER DATA SENSE

ASCII value of the character located at the memory address pointer

READ TERMINAL STATUS

A 30 byte status message reflecting switch setting, diagnostic results, communication protocol, etc.

SCROLL

When display memory is filled the bottom line data will scroll upward. Top down overwrite (roll) is switch selectable

EDITING OPERATIONS

Insert/Delete on a character or line basis plus tab, back tab, backspace and character overwrite. The clear entry (CE) operation will erase the field the cursor is in and position it at the beginning of the same field while in a protected mode of operation

ERASE FUNCTIONS

Erase to end of page
Erase to end of field (protected)
Erase to end of line (unprotected)
Clear variable data
Clear all data

COMMUNICATION INTERFACE

Serial RS232C/Current Loop

TRANSMISSION RATE

19.2K XON XOFF protocol
Switch selectable 110 to 9,600 baud (EIA)
Switch selectable 110 to 9,600 baud (CL)

PARITY

Switch selectable, odd, even, mark, or space

COMMUNICATION MODE

Full duplex
Half duplex
Echoplex
Asynchronous only

OPERATIONAL MODES

Conversational: Character by character transmission
Line: Line at a time transmission
Page: Full or partial page transmission
Forms: Allows for operator or host CPU building of formatted display
Local: Off line display data entry
Line Monitor: Displays all ESC codes and control code sequences

TERMINATION CHARACTER

Switch selectable CR, EOT, ETX, CR LF

TIME OF DAY CLOCK

A real time clock that may be set by the host CPU or operator

CPU MESSAGE DEPOSIT

An 80 character message buffer holds host CPU data and prints "MSG WAIT" on status line for operator recovery

ERROR INDICATORS

Status line messages reflect operator error and system status

BELL

Audible alarm upon receipt of control G or as the cursor passes through the 72nd character location when data is being entered from the keyboard. The continuous alarm on/off feature is included

KEYBOARD

A 61 key ANSI compatible TTY/Typewriter compatible layout featuring auto repeat, two key rollover, alpha lock and lower case inhibit. Also includes a 14 key numeric pad with associated field termination control keys. The sixteen programmed function keys, cursor control keys, and system mode on control keys are included

AUXILIARY INTERFACE

A serial bidirectional interface that has a character buffer on both the send and receive lines. Transparent printing, communications control, as well as independent baud rates are standard

SELF DIAGNOSTICS

Either through host CPU control, operator initiated, or upon power up

INPUT VOLTAGE AND FREQUENCY

115 VAC ± 10% 60 Hz

ENVIRONMENTAL SPECIFICATIONS

Altitude: Sea level to 10,000 feet
Temperature: 0°C to 40°C
Humidity: 10 to 80% (Non-condensing)

TERMINAL SIZE

18" W x 13" H x 22.5" D

TERMINAL WEIGHT

43 lbs. (Approximate)

TERMINAL FINISH

Textured

OPTIONS

• 230 VAC ± 10% 50 Hz
• Composite Video

SPECIFICATIONS SUBJECT TO CHANGE AT ANY TIME WITHOUT NOTICE

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