

**FEATURES:** Multi Page Operation • 16 Loadable Function Keys (optional) • Auxiliary Parallel I/O • Extensive Formatting and Editing Capability.

The microprocessor based DM30 is designed for the sophisticated user who requires an extensive fully featured terminal. The terminal offers optional capabilities which allow up to four pages of memory and 16 loadable function keys. The function keys are dynamically spread across a 4K memory and may be used independently or linked based on application requirement. The DM30 offers a plug compatible parallel printer interface as standard. Full editing and formatting facilities are provided throughout the display memory including selectable entry parameters for alpha, numeric, total fill, must fill, constant and modified mode.

Communication facilities via the serial asynchronous RS232C, main and auxiliary ports are speed selectable via software or hard switches up to 19,200 baud. Standard communications facilities of the DM30 include conversational, line, page, block or message modes.

fully featured smart terminal







The DM3S is a DM30 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 DM30 that require special protocols (firmware), the DM3S is your answer. You may develop your own firmware or have it developed by Beehive.

## **SPECIFICATIONS**

DISPLAY FORMAT

24 lines x 80 characters

**DISPLAY MEMORY** 

Two pages, 3840 characters 48 lines x 80 characters

STATUS LINE 25th line of display

DISPLAY SIZE

6.5" high x 8.5" wide

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** 

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  $\operatorname{\textbf{CURSOR}}$   $\operatorname{\textbf{SENSE}}$ 

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.

SCRÖLL

When display memory is filled the bottom line data will scroll upward. I/O or Keyboard Forwarding or reverse scrolling and page selection

**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

PRINTER INTERFACE

Plug compatible parallel printer interface

COMMUNICATIONS INTERFACE

Serial BS232C/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

Four pages of memory16 Loadable function keys

SPECIFICATIONS SUBJECT TO CHANGE AT ANY TIME WITHOUT NOTICE

## SALES OFFICES

CALIFORNIA Costa Mesa (714) 540-8404 • Sunnyvale (408) 738-1560

FLORIDA Altamonte Springs (305) 830-4666 ILLINOIS Arlington Heights (312) 593-1565

MASSACHUSETTS Woburn (617) 933-0202 NEW YORK New York (212) 682-2760 UTAH Salt Lake City (801) 355-6000

WASHINGTON, D.C. (VA) Falls Church (703) 356-5133



## BEEHIVE INTERNATIONAL

"A proven competitive manufacturer of smart terminals"