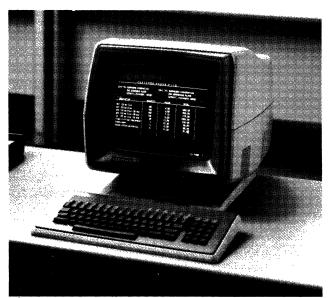# Unisys ET 1100 Display Terminals

MANAGEMENT SUMMARY

UPDATE: *In mid-1986 Burroughs Corporation acquired Sperry Corporation. The joint corporation has since been renamed Unisys, with all products of the two companies now being marketed under the Unisys name. The individual product lines have, thus far, remained unchanged.*

Burroughs Corporation introduced the ET 1100 display terminals in April 1983 to replace the MT 983 and MT 985 units. These units earlier replaced Burroughs' highly successful TD 830 terminal line. With ergonomics being a major concern to terminal users, the ET 1100 terminals feature such enhancements as an etched, nonglare screen; a high-resolution, 14-inch display unit; a tilt/swivel-adjustable base; and a detached, low-profile keyboard.

In addition to these ergonomic enhancements, the ET 1100 terminals offer a variety of editing and display functions. The standard display format of 26 lines by 80 characters includes a user-programmable status line and a system status line; double-height/double-width characters may be either configured or set programmatically. A multipage scroll function allows multiple pages to be treated as one large page. A printer pass-through function allows data to be routed from the host processor to a printer without inhibiting ET 1100 display activity. A configuration menu feature allows the user to view and modify optional parameters for address, buffer allocation, printing options, editing characteristics, screen format, and data communication attributes.

The ET 1100 series consists of two models. The standard ET 1100 features RS-232-C/TDI communications. The ▷

The ET 1100 display terminal is Unisys' general-purpose workstation for the company's computer systems. The standard ET 1100 is equipped with RS-232-C/TDI interfacing; the ET 1101 version features UDAA communications.

The ET 1100 display terminals succeeded the older Burroughs TD 830 and MT 983/985 models. These general-purpose terminals are designed for use with Unisys' broad line of computer products, including the B 90 and B 1900 minicomputers, and the A 3, A 9, A 15, B 2900, B 3900, and B 7900 large computer systems. The ET 1100 terminals are available with either RS-232-C/Two-Wire Direct Interface (TDI) interfacing or Unisys Direct Asynchronous Access (UDAA) interfacing.

MODELS: ET 1100 and ET 1101.
DISPLAY: A 14-inch, (diagonally measured) display screen is standard for both the ET 1100 and ET 1101. Screen capacity is 2,080 characters, arranged in 24 lines of 80 characters each, plus 2 additional status display lines.
KEYBOARD: A detached, low-profile, typewriter-style keyboard with 10 user-programmable function keys is standard.
COMPETITION: Beehive, Carterfone, Cybernex, Delta Data, and Visual Technology make Unisys-compatible terminals.
PRICE: Each models sell for $1,580; lease plans are available.

CHARACTERISTICS

VENDOR: Unisys Corporation, Unisys Place, Detroit, Michigan 48232. Telephone (313) 972-7000.

DATE OF ANNOUNCEMENT: April 1983.

DATE OF FIRST DELIVERY: May 1983.

NUMBER DELIVERED TO DATE: Information not available.

SERVICED BY: Unisys Corporation.

MODELS

The ET 1100 is a stand-alone unit featuring a 14-inch (diagonally measured) display screen and a typewriter-style alphanumeric keyboard. The model is available with a choice of RS-232-C and TDI data communications interfacing (Model ET 1100) or UDAA interfacing (Model ET 1101). Optional peripherals include a variety of dot matrix and letter-quality printers.

TRANSMISSION SPECIFICATIONS

Transmission is in half-duplex mode at speeds up to 38,400 bps; synchronous or asynchronous communication is selectable from the keyboard or host system. RS-232-C and Unisys TDI interfaces are standard on Model ET 1100; a UDAA interface is standard on the ET 1101. Standard communications procedures supported include ODT point-to-point, poll, select, fast select, contention, broadcast, group ▷

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▶ ET 1101 version features Unisys Direct Asynchronous Access communications. The ET 1100 terminals are designed specifically for use with Unisys' line of minicomputer and large computer systems. Unysis systems that provide for the use of ET 1100 workstations include the B 90 and B 1900 minicomputers; the A 3, A 9, and A 15 computer systems; and the B 2900, B 3900, and B 7900 computer systems.

Unisys also markets the ET 2000 series of multifunction workstations. Unlike the ET 1100 line, the ET 2000 products provide local storage, bit-mapped graphics, and color as well as monochrome displays.

COMPETITIVE POSITION

The acquisition of Sperry by Burroughs adds significant strength to an already strong and well-known corporation. The joint assets of these computer industry giants stand to enhance the competitive position of the Unisys Corporation among other members of the vendor group (NCR, Control Data, and Honeywell) formerly known as the BUNCH. These companies deal primarily in the areas of minicomputers and large computer systems. Unisys terminals are designed primarily for use in Unisys operating environments and, therefore, do not offer IBM or standard teletype compatibility. Within this market, Unisys is not faced with particularly stiff competition from any of the independent terminal vendors. There are a number of terminal manufacturers that offer a Unisys-compatible model as part of their product line; however, these models do not serve as an integral member of those lines. Listed among these vendors are Beehive, Carterfone, Cybernex, Delta Data, and Visual Technology.

ADVANTAGES AND RESTRICTIONS

Aside from incorporating enhanced functionality and improved ergonomic features into the Unisys ET 1100, a particular advantage is the combined technology of Burroughs and Sperry. Their long-standing reputation for manufacturing quality products can only mean benefits to the consumer.

At the inception of the merger, it was feared by many within the computer industry that such a venture would be disastrous, primarily because it seemed impossible for two such giants to coexist within the same corporate framework. To the suprise of the industry, the merger appears to have taken place without the anticipated squabbles, backstabbing, and shakeout of Sperry personnel.

USER REACTION

In Datapro's most recent Terminal Users Survey, conducted in conjunction with *Data Communications* magazine, a total of four responses were received from users of the ET 1100 display terminals. The users represented an installed base of 469 terminals. The users were asked to rate their terminals in seven specific categories. Their ratings are summarized in the following table. ▷

▶ select, and group poll. Data compression through the insertion of tab field identifiers at the end of variable fields eliminates the transmission of spaces between actual data fields.

DEVICE CONTROL

Variable functional features configurable through the keyboard or host system program control include data rate, page length, characters per line, number of pages, cursor control, variable or fixed tabulation positions, field overflow inhibit, wraparound inhibit, terminal address selection, and data communications control.

The cursor can be configured as a blinking or nonblinking block; it can be positioned from the host, and its position can be transmitted to the host. The cursor can also be moved via any of the following functions: fixed tabulation—establishing fixed tab stops every eighth character within the line; variable tabulation—establishing columnar tab stops at any position within the line; and reverse tabulation—moving the cursor from a field to a prior field, or from a tab stop to a prior tab stop.

The field overflow inhibit function provides for cursor movement between unprotected data fields through the use of the Tab and Reverse Tab keys. The wraparound inhibit function prevents cursor advancement beyond the last character position on a page as additional keyboard data is entered. An audible alarm can be sounded as the cursor reaches a predetermined character position on a page; this feature is also keyboard or host selectable.

A line monitor mode feature makes it possible to send and receive messages on one page while the line monitor operates on another. The user may shift between line monitor and data entry pages as desired. Access to the line monitor is controlled through a security feature, which can also be used to prevent access to the configuration menu and the host application.

Data can be formatted into unprotected, protected, and transmittable protected fields through the terminal's forms mode capability. Any two characters can be selected as delimiters to define an unprotected data field. Transmittable protected data field delimiters are fixed. Unprotected and transmittable protected fields can both be transmitted when the terminal is in forms mode. Data fields can also be right-justified through the keyboard or host.

Edit functions include character insert/delete, line insert/delete, line move up/down, clear to end-of-line/page, and search mode (for locating and correcting error characters, including those positioned in protected fields). Data highlighting attributes include blink, underline, bright, secure (data is entered but not displayed), and reverse video.

A page roll capability allows data to be rolled up or down within the page while the cursor remains in a fixed position on the screen. The screen can be used as a window to the display memory through the scroll function. With this capability, the entire contents of the display memory can be examined without regard to page boundaries as data is transferred line for line across the display screen. During scrolling, the cursor remains in a fixed position on the screen.

LED indicators on the keyboard include the Line Terminal Activity Indicator; Enquiry Indicator; Local Indicator; Receive Indicator; and the Transmit Mode Indicator and caps lock. The twenty-fifth display line provides 80 characters for the display of user-written error messages; a twenty-sixth line provides for the display of system status information such as existing or previous error conditions; cursor page ▶

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	Excellent	Good	Fair	Poor	WA*
Overall performance	3	1	0	0	3.8
Ease of operation	2	2	0	0	3.5
Display clarity	3	1	0	0	3.8
Keyboard feel & usability	2	2	0	0	3.5
Ergonomics	3	1	0	0	3.8
Hardware reliability	2	2	0	0	3.5
Mfr.'s maintenance service/technical support	2	1	1	0	3.3

*Weighted Average on a scale of 4.0 for Excellent.

▷ The users were also asked whether or not they would recommend their Unisys ET 1100 terminals to another user. All four answered that they would. □

▶ number; and host messages which are not accessible to the operator.

COMPONENTS

CRT DISPLAY UNIT: The ET 1100 and ET 1101 terminals feature a 14-inch (diagonally measured) display screen with tilt/swivel display base as standard. Screen capacity is 2,080 characters, arranged in 24 lines of 80 characters, with 2 additional lines for user and system status information. Ten pages of display memory are standard. Characters are displayed in green (P39 phosphor) and formed utilizing a 7-by-9 dot matrix. Double-width and double-height characters are available. Normal video features green characters on a dark background. In negative video condition, characters are displayed in green on a white background. The 128-character ASCII set is displayable, including uppercase, numerics, and special symbols. A vertical height-adjustment feature is optional.

KEYBOARD: A detached, low-profile, typewriter-style keyboard with 10 user-programmable function keys (20 logical functions) is standard. Featured keyboard functions include caps lock, numerics lock, and N-key rollover. All keys are typematic. A 25-key numerics keypad and a palm rest attachment are optionally available.

PRICING

The ET 1100 family terminals are available for purchase or on a one-, three-, or five-year lease. Annual contracts for on-site or depot maintenance are available; the maintenance prices listed in this report are for on-site maintenance.

EQUIPMENT PRICES

		Purchase Price ($)	Monthly Charge			
			1-Year Lease ($)	3-Year Lease ($)	5-Year Lease ($)	Maintenance ($)
Models						
ET 1100	Display Terminal w/keyboard & RS-232-C/TDI	1,580	105	88	79	20.33
ET 1101	Display Terminal w/keyboard & BDAA	1,580	105	88	79	20.33
Options						
ET 5601	3-inch Height Adjustment	125	9	7	7	NA
ET 5200	25-key Auxiliary Keypad	125	13	11	10	1.80

NA—Not applicable. ■