TEC Display Terminals

TEC's ET80 display terminal is designed to meet international ergonomic requirements for video display terminals. The ET80 includes a 15-inch adjustable display monitor with a positive dark-on-light display, and a low-profile keyboard that conforms to the DIN standards for ergonomics.

TEC, Incorporated has been involved in the manufacture of CRT display terminals virtually from the beginning of the industry. The company currently offers a family of ergonomically designed, teletype-compatible video display units. The newest members of the product line are the ET80, a general-purpose display, and the ET100, which features DEC VT100 compatibility.

MODELS: 631, 632, ET80, and ET100.
DISPLAY: 12-inch (diagonal) display screen for Models 631 and 632; 15-inch (diagonal) display screen for Models ET80 and ET100, with pedestal-mount as standard.
KEYBOARD: Detached, with typewriter-style layout. A 15-key numeric pad is standard on ET80/100 models and optional on 631/632 terminals.
COMPETITION: DEC, CIE Terminals, Lear Siegler, TeleVideo, Wyse Technology, Liberty Electronics, Ann Arbor Terminals, Micro-Term, and several others.
PRICE: $1,310 to $1,995, with OEM discounts available.

MANAGEMENT SUMMARY

UPDATE: *The following report details the current display terminal product offerings of TEC, Incorporated, a long-time supplier of video display terminals.*

TEC, Incorporated, established in 1958, was the first independent commercial CRT terminal manufacturer. In recent years, the company has increased its emphasis on ergonomics, or "human engineering," in the design of its products. All TEC terminals feature nonglare screens, detached keyboards, and full editing capabilities. A display capacity of 2,000 characters (arranged in 25 80-character lines) is standard.

TEC's current offering of display terminals consists of two separate series: the older DATA-SCREEN Series 630 and the new ET (Ergonomic Terminal) Series 80/100. The current Series 630 models are the last remaining members of the DATA-SCREEN display terminal family, which first premiered in June 1977.

DATA-SCREEN Series 630 terminals feature 12-inch display screens with white characters displayed on a dark background, and the standard display format of 25 lines by 80 columns. Of the two available models, 631 is a domestic terminal, while Model 632 features export compatibility. Standard features include: conversational or buffered transmission; protected fields; full editing capabilities (insert/delete character/line, erase to end of line/page, clear screen/memory); page or roll-up mode; scrolling; user programmable-auxiliary I/O port; six user-defined function keys; user-programmable horizontal split screen; and video

CHARACTERISTICS

VENDOR: TEC, Inc., 2727 N. Fairview Avenue, Tucson, Arizona 85705. Telephone (602) 792-2230.

DATE OF ANNOUNCEMENT: Series 630—November 1980; ET80/100—May 1981.

DATE OF FIRST DELIVERY: Series 630—January 1981; ET80/100—January 1982.

NUMBER DELIVERED TO DATE: Information not available.

SERVICED BY: TEC factory service.

MODELS

All TEC terminals are microprocessor-based, standalone teletype-compatible units with full editing capability.

SERIES 630: Features 12-inch (diagonal) display screens and standard display format (light characters on a dark background). Two models are available. Model 631 is a domestic terminal; the 632 features export compatibility.

SERIES ET80/100: Terminals feature 15-inch (diagonal) display screens; positive display format (dark characters on a light background); low-profile keyboards; and pedestal-mounted CRT units. Model ET80 is a general-purpose terminal; ET100 features DEC VT100 compatibility, menu-driven set-up mode, and selectable 80- or 132-character display modes.

TRANSMISSION SPECIFICATIONS

All models transmit asynchronously in half- or full-duplex mode. The Series 630 features eight selectable transmission

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attributes (blink, blank, reduced intensity, reverse video, and nondestructive underline). Options include: extended keyboard (with 15-key numeric pad); one or three additional pages of memory; green or amber display; current loop interface; function key programming; composite video; tilt/swivel base; and a magnetic stripe card reader keyboard.

TEC's newer, ergonomically enhanced ET Series 80/100 terminals feature 15-inch display screens, positive display format (dark characters on a light background), and adjustable pedestal-mount display units as standard. Two models are currently available in this series: ET80 is a general-purpose ASCII display terminal; Model ET100 features DEC VT100 compatibility. Standard features for both models include: conversational or buffered transmission; page or roll-up mode; scrolling up/down and left/right; enhanced forms (protected/unprotected, alpha only, numeric only, must fill, right justify, print only); full editing capabilities (same as Series 630); horizontal/vertical split screen; auxiliary I/O port; video attributes (blink, blank, bold, inverse, and reduced intensity); and double height/width characters. Model ET100 also provides a menu-driven set-up mode, selectable 80- or 132-character display modes, and an auxiliary printer port. Options include: magnetic stripe card reader keyboard (for Model ET80 only) and current loop interface.

COMPETITIVE POSITION

TEC has attempted to establish a niche in the high-end of the display terminal market, shying away from the severe price cutting that has taken place in the low-end of the market. The ET Series terminals stress ergonomic design and functionality, rather than low price. The ET100 is TEC's entry into the lucrative DEC-compatible market. With the introduction of the new generation VT200 series by DEC, look for TEC to introduce a competitive VT200-compatible model in the future. Meanwhile, the ET100 is an alternative to the older Digital Equipment Corporation terminals, including the VT52, VT100, VT101, and VT102 display terminals; it also competes with the large number of comparable product offerings from other major independent vendors. Among its competitors in the VT100-compatible marketplace are the CIE Terminals, Wyse Technology, Micro-Term, Visual Technology, TeleVideo Systems, Tab Products, and several others. In the general-purpose market, it competes with high-end offerings from companies such as Ann Arbor Terminals, Teleray, Lear Siegler, and many others.

ADVANTAGES AND RESTRICTIONS

Ergonomic design and a wide variety of editing and display features are major advantages of the ET80/100 terminals. One drawback of Model ET100, which provides VT100 compatibility, is its 25-by-80 character display format. When used in 132-character mode, horizontal scrolling is required to display complete lines of information.

Datapro received an insufficient number of responses from TEC terminal users in the 1985 Terminal Users Survey;

rates from 110 to 9600 bps; Series ET80/100 features selectable rates to 9600 bps. Odd, even, or mark parity is standard. The 10- or 11-bit ASCII code is used. All models are equipped with an RS-232-C interface; a 20/60 ma current loop interface is optional. Model 632 features export power compatibility and line lock.

DEVICE CONTROL

Transmission is performed on a character-by-character basis as it is keyed, or on a buffered basis by line, page, or partial page. Terminals can also be set to send unprotected data only. Video attributes available on all models include blink, blank, nondestructive underline, reduced intensity, or reverse video. Each attribute can be selected on a character-basis. Protected fields are available on all models; alpha only and numeric only field designations are available on the Series ET80/100. Page or scrolling operation can be selected. A monitor mode is also available to facilitate software debugging.

Cursor controls include cursor up, down, left, right, home, return, load, and read. Cursor sensing and X-Y positioning are standard. The cursor appears as a blinking block (nonblinking in off-line mode) on Series 630 models. An underline, blinking underline, block, blinking block, or blank cursor format is selectable on Series ET80/100 models.

Tab functions include set, clear, forward, back, auto tab, and columnar tab. Edit functions include insert/delete character/line, erase to end of line/page, clear screen, clear memory, and software-controlled erase to spaces/nulls. Auto line feed on carriage return is selectable for all models. Series 630 terminals feature one page of display memory with additional pages of memory optional; Series ET80/100 terminals feature four pages of display memory. Horizontal split-screen is user-programmable in Series 630 models; in ET80/100 models, horizontal/vertical split-screen is standard.

Models 630-C and ET80 also provide an optional magnetic stripe card reader that reads cards encoded to the International Air Transport Association (IATA) standard. Up to 78 alphanumeric characters can be recorded on each card, but the terminal reads only the first 64 characters. Data read from the card is stored in the terminal's memory but is not displayed on the CRT.

COMPONENTS

SERIES 630 DISPLAY UNIT: A 12-inch (diagonally measured) CRT is standard. Characters are formed utilizing a 6-by-8 dot matrix in an 8-by-10 field. Characters are displayed in white phosphor on a dark background; green and amber character phosphors are optionally available. Both models feature a 2,000-character display arranged in a screen format of 25 lines by 80 characters. A tilt/swivel display base is also optional.

ET80/100 DISPLAY UNIT: A 15-inch (diagonally measured) CRT unit with pedestal-mount is standard. Characters are formed utilizing a 7-by-11 dot matrix in a 9-by-13 field. Characters are displayed in dark letters on a light background. Both models feature a 2,000-character display arranged in a screen format of 25 lines by 80 characters. Model ET100 provides 132-character mode VT100 emulation through its horizontal scrolling function.

SERIES 630 KEYBOARDS: All keyboards are detached, with a typewriter-style layout containing 81 keys. Six function keys are included, capable of generating 16 two-character code sequences. All keys are typematic (auto repeating); keyboard click (audible feedback) is adjustable. The keyboard is connected to the display monitor via a coiled cord.

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> therefore, no User Reaction section appears in this report. □

An extended keyboard with a 15-key numeric pad is optionally available. Model 630-C can be optionally equipped with a magnetic stripe card reader keyboard.

ET80/100 KEYBOARDS: The ET80 and ET100 terminals contain a detachable keyboard with a low-profile design that conforms to the European DIN standard for ergonomics (the height of the middle row of keys is 30 mm at 11 degrees). Keys are stepped and sculptured, and include an adjustable audible feedback. A separate numeric pad is included, and cursor editing keys are also grouped in a separate cluster. A total of 18 user-programmable function keys are included, with nonvolatile memory or down-line loadability. Keys and key groupings are color coded for easy and quick identification. Four user-controlled LED status indicators are also included. The keyboard is connected to the terminal's pedestal base via a coiled cord.

PRICING

The TEC terminals are available on a purchase basis only. End-user and OEM quantity discounts are provided, as well as special discounts for distributors, government agencies, and educational institutions. The terminals are covered under a 90-day warranty. Factory service is provided by TEC.

Models	Purchase Price ($)
Series 630—	
Models 631/632	1,310
Models 631-C/632-C	1,995
ET Series—	
Model ET80	1,975
Model ET100	1,995 ■

TEC Data-Screen 630 and ET80/100 Display Terminals

TEC's ET80 display terminal features a 15-inch screen, positive display format, and a low-profile keyboard. The CRT unit is pedestal-mounted, and can be adjusted horizontally and vertically. All TEC terminals feature a display capacity of 2000 characters, arranged in 25 lines of 80 characters each.

TEC, Incorporated offers ergonomically designed, Teletype-compatible video display units. Model ET100 features DEC VT100 compatibility.

MODELS: 631, 632, ET80, and ET100.
DISPLAY: 12-inch (diagonal) display screen for Models 631 and 632; 15-inch (diagonal) display screen for Models ET80 and ET100, with pedestal-mount as standard.
KEYBOARD: Detached, with typewriter-style layout. A 15-key numeric pad is standard on ET80/100 models and optional on 631/632 terminals.
COMPETITION: DEC, C. Itoh, Lear Siegler, and Lee Data.
PRICE: $750 to $1,995, with OEM discounts available.

MANAGEMENT SUMMARY

TEC, Incorporated, established in 1958, was the first independent commercial CRT terminal manufacturer. In recent years, the company has increased its emphasis on ergonomics, or "human engineering," in the design of its products. All TEC terminals feature non-glare screens, detached keyboards, and full editing capabilities. A display capacity of 2000 characters (arranged in 25 80-character lines) is standard.

TEC's current offering of display terminals consists of two separate series: the Data-Screen Series 630 and the ET (Ergonomic Terminal) Series 80/100. The Series 630 models are the last remaining members of the Data-Screen display terminal family, which first premiered in June, 1977.

Data-Screen Series 630 terminals feature 12-inch display screens with the standard display format of light characters on a dark background. Of the two available models, 631 is a domestic terminal, while Model 632 features export compatibility. Standard features include: conversational or buffered transmission; protected fields; full editing capabilities (insert/delete character/line, erase to end of line/page, clear screen/memory); page or roll-up mode; scrolling; user programmable auxiliary I/O port; six user-defined function keys; user programmable horizontal split screen; and video attributes (blink, blank, reduced intensity, reverse video, and non-destructive underline). Options include: extended keyboard (with 15-key numeric pad); one or three additional pages of memory; green or amber display; current loop interface; function key programming; composite video; tilt/swivel base; and a magnetic stripe card reader keyboard.

CHARACTERISTICS

VENDOR: TEC, Inc., 2727 N. Fairfield Avenue, Tucson, Arizona 85705. Telephone (602) 792-2230.

DATE OF ANNOUNCEMENT: Series 630—November 1980; ET80/100—May 1981.

DATE OF FIRST DELIVERY: Series 630—January 1981; ET80/100—January 1982.

NUMBER DELIVERED TO DATE: Information not available.

SERVICED BY: TEC factory service.

MODELS

All TEC terminals are microprocessor-based, standalone Teletype-compatible units with full editing capability.

SERIES 630: Features 12-inch (diagonal) display screens and standard display format (light characters on a dark background). Two models are available. Model 631 is a domestic terminal; the 632 features export compatibility.

SERIES ET80/100: Terminals feature 15-inch (diagonal) display screens; positive display format (dark characters on a light background); low-profile keyboards; and pedestal-mounted CRT units. Model ET80 is a general-purpose terminal; ET100 features DEC VT100 compatibility, menu-driven set-up mode, and selectable 80- or 132-character display modes.

TRANSMISSION SPECIFICATIONS

All models transmit asynchronously in half- or full-duplex mode. The Series 630 features eight selectable transmission rates from 110 to 9600 bps; Series ET80/100 features selectable rates to 9600 bps. Odd, even, or mark parity is standard. The 10- or 11-bit ASCII code is used. All models are equipped with an RS-232-C interface; a 20/60mA current loop interface is optional. Model 632 features export power compatibility and line lock.

TEC Data-Screen 630 and ET80/100 Display Terminals

TEC's newer, ergonomically enhanced ET Series 80/100 terminals feature 15-inch display screens, positive display format (dark characters on a light background), and adjustable pedestal-mount display units as standard. Two models are currently available in this series: ET80 is a basic ASCII display terminal; Model ET100 features VT100 compatibility. Standard features for both models include: conversational or buffered transmission; page or roll-up mode; scrolling up/down and left/right; enhanced forms (protected/unprotected, alpha only, numeric only, must fill, right justify, print only); full editing capabilities (same as Series 630); horizontal/vertical split screen; auxiliary I/O port; video attributes (blink, blank, bold, inverse, and reduced intensity); and double height/width characters. Model ET100 also provides a menu-driven set-up mode, selectable 80- or 132-character display modes, and an auxiliary printer port. Options include: magnetic stripe card reader keyboard (for Model ET80 only) and current loop interface.

COMPETITIVE POSITION

The ET100 is TEC's entry into the increasingly competitive VT100-compatible ASCII sub-market. Here TEC not only competes with Digital Equipment Corporation's VT52, VT100, VT101, and VT102 display terminals; but with comparable product offerings from other major independents. Among its competitors in the VT100-compatible marketplace are the C. Itoh CIT80, Lear Siegler ADM36, Lee Data Series 400, TeleVideo Model 900, and Northern Telecom NT298.

ADVANTAGES AND RESTRICTIONS

Ergonomic design and a wide variety of editing and display features are major advantages of all Series 630 and ET80/100 terminals. A drawback of Model ET100, which provides VT100 compatibility, is its 25-by-80 character display format. When used in 132-character mode, horizontal scrolling is required to display complete lines of information.

USER REACTION

Datapro received no responses from TEC terminal users in the 1982 alphanumeric display terminal survey, and TEC declined to provide us with user names; therefore, no User Reaction section appears in this report.□

DEVICE CONTROL

Transmission is performed on a character-by-character basis as it is keyed, or on a buffered basis by line, page, or partial page. Terminals can also be set to send unprotected data only. Video attributes available on all models include blink, blank, non-destructive underline, reduced intensity, or reverse video. Each attribute can be selected on a character basis. Protected fields are available on all models; alpha only and numeric only field designations are available on the Series ET80/100. Page or scrolling operation can be selected. A monitor mode is also available to facilitate software debugging.

Cursor controls include cursor up, down, left, right, home, return, load, and read. Cursor sensing and X-Y positioning are standard. The cursor appears as a blinking block (non-blinking in off-line mode) on Series 630 models. An underline, blinking underline, block, blinking block, or blank cursor format is selectable on Series ET80/100 models.

Tab functions include set, clear, forward, back, auto tab, and columnar tab. Edit functions include insert/delete character/line, erase to end of line/page, clear screen, clear memory, and software-controlled erase to spaces/nulls. Auto line feed on carriage return is selectable for all models. Series 630 terminals feature one page of display memory with additional pages of memory optional; Series ET80/100 terminals feature four pages of display memory. Horizontal split-screen is user-programmable in Series 630 models; in ET80/100 models, horizontal/vertical split-screen is standard.

Models 630-C and ET80 also provide an optional magnetic stripe card reader that reads cards encoded to the International Air Transport Association (IATA) standard. Up to 78 alphanumeric characters can be recorded on each card, but the terminal reads only the first 64 characters. Data read from the card is stored in the terminal's memory but is not displayed on the CRT.

COMPONENTS

SERIES 630 DISPLAY UNIT: A 12-inch (diagonally measured) CRT is standard. Characters are formed utilizing a 6-by-8 dot matrix in an 8-by-10 field. Characters are displayed in white phosphor on a dark background; green and amber character phosphors are optionally available. Both models feature a 2000-character display arranged in a screen format of 25 lines by 80 characters. A tilt/swivel display base is also optional.

SERIES ET80/100 DISPLAY UNIT: A 15-inch (diagonally measured) CRT unit with pedestal-mount is standard. Characters are formed utilizing a 7-by-11 dot matrix in a 9-by-13 field. Characters are displayed in dark letters on a light background. Both models feature a 2000-character display arranged in a screen format of 25 lines by 80 characters. Model ET100 provides 132-character mode VT100 emulation through its horizontal scrolling function.

KEYBOARDS: All keyboards are detached, with typewriter-style layouts. An extended keyboard with a 15-key numeric pad is standard on ET80/100 models; this feature is optionally available on Series 630 terminals. Models 630-C and ET80 can be optionally equipped with a magnetic stripe card reader keyboard.

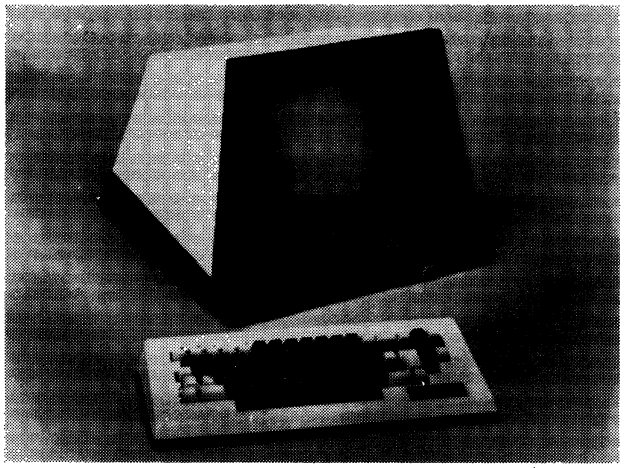
PRICING

The TEC terminals are available on a purchase basis only. End-user and OEM quantity discounts are provided, as well as special discounts for distributors, government agencies, and educational institutions. The terminals are covered under a 90-day warranty. Factory service is provided by TEC.

For some of the models on the following price list, a range of prices is given, reflecting some of the options offered.

	Purchase Price
Series 630	
Models 631/632	**$1,310**
Models 631-C/632-C	**1,995**
Series ET80/100	
Model 80B	**1,975**
Model 100B	**1,995**■

TEC Data-Screen Display Terminals



TEC's newest terminal offering is the Series 630 Data-Screen terminal. Ergonomic features include a detached keyboard and a non-glare display screen. A tilt/swivel display base is optionally available.

A family of ergonomically-designed, Teletype-compatible display terminals.

All Data-Screen terminals feature a 12-inch (diagonal) display screen with a screen capacity of 2000 characters arranged in 25 lines of 80 characters each. Users can choose either an attached or detached keyboard, with or without a separate numeric pad. A magnetic stripe card reader keyboard is available with some models.

The TEC Data-Screen terminals are available for purchase only, with end-user prices ranging from $700 to $3,100. OEM discounts are available, and TEC will customize terminals to fit OEM requirements.

MANAGEMENT SUMMARY

TEC, Incorporated, established in 1958, was the first independent commercial CRT terminal manufacturer. Its family of Data-Screen display terminals currently consists of four separate series—the Series 70, Series 510/610, Series 530/630, and Series 570/670. The Series 70 terminals consist of a pedestal-mounted CRT and a separate keyboard. With regard to the other models, the 500 model terminals are CRTs with attached keyboards, while the 600 model terminals feature detached keyboards.

Series 70 is the oldest of the current offerings, and consists of five models, which differ in the emulation capabilities they support. Standard features on all models include: limited graphics capabilities (line and bar drawings); two RS-232-C I/O ports; special function keys; absolute cursor reading and loading; edit and erase features; and an edit/attribute package which enables buffered operation and provides video attributes such as blink, reverse video, reduced intensity, and protected and security fields. The screen can be tilted or swiveled, and contains a CRT saver feature. Options available with the Series 70 terminals include: expanded display memory (one or two pages); Data Panel (up to 16 individually selectable light indicators); 15-key numeric pad; user-specified function key programming; green or yellow phosphor characters; and a current loop interface. An IATA-compatible magnetic stripe card reader is featured on Model 70C. Emulation is provided for Teletype compatibility (Model 70X), the TEC 2401/2402 (Model 70A), the Univac Uniscope 100/200 (Model 70U), and the DEC VT-52 (Model 70V).

The Series 510/610 consists of four low-end models: Models 511, 512, 611, and 612. In addition to the keyboard differences, Models 511 and 611 are domestic models,

CHARACTERISTICS

VENDOR: TEC, Inc., 2727 N. Fairfield Avenue, Tucson, Arizona 85705. Telephone (602) 792-2230.

DATE OF ANNOUNCEMENT: Series 70—June 1977; Series 510/610—April 1978; Series 530/630—November 1980; Series 570/670—April 1978.

DATE OF FIRST DELIVERY: Series 70—August 1977; Series 510/610—July 1978; Series 530/630—January 1981; Series 570/670—July 1978.

NUMBER DELIVERED TO DATE: Information not avialable.

SERVICED BY: TEC factory service.

MODELS

SERIES 70—Five models are available. The 70X is the standard Series 70 terminal. The 70A is TEC 2401/2402-compatible, the 70U is Uniscope 100/200-compatible, and the 70V is DEC VT-52-compatible. The 70C is equipped with a keyboard that includes a magnetic stripe card reader. All Series 70 models are microprocessor-based, stand-alone, Teletype-compatible display terminals that consist of a pedestal-mounted CRT monitor, which swivels horizontally and tilts vertically, and a detachable keyboard.

SERIES 510/610—Consists of four models. Models 511 and 512 feature attached keyboards, while Models 611 and 612 feature detached keyboards. Models 511 and 611 are domestic models, while Models 512 and 612 feature export power compatibility and international character sets. All four models are microprocessor-based, stand-alone, Teletype-compatible units.

SERIES 530/630—Four models are available. Models 531 and 532 feature attached keyboards, while Models 631 and 632 feature detached keyboards. Models 531 and 631 are domestic models, while Models 532 and 632 feature export power compatibility and international character sets. The 630 models can be configured with a Magnetic Card Stripe Reader Keyboard. All four models are microprocessor-based, stand-alone, Teletype-compatible units with full editing capabilities.

TEC Data-Screen Display Terminals

while Models 512 and 612 feature export power compatibility and a variety of international character sets. Standard features on all four models include: conversational or buffered operation; protected fields; X-Y cursor positioning; cursor sensing; page mode or roll-up mode; and video attributes (blink, blank, reduced intensity, reverse video, and non-destructive underline). Options include: extended keyboard (with 15-key numeric pad) for 610 Series only; separate numeric pad; auxiliary RS-232-C port; current loop interface; non-glare screen filters; audible alarm; and a tilt/swivel base (Models 611/612 only).

The Series 530/630 includes full editing capabilities and also consists of four models: Models 531, 532, 631, and 632. Like the 510/610 Series, the 531 and 631 are domestic terminals, while the 532 and 632 feature export compatibility. Standard features include: conversational or buffered transmission; protected fields; full editing capabilities (insert/delete character/line, erase to end of line/page, clear screen/memory); page or roll-up mode; scrolling; user programmable auxiliary I/O port; six user-defined function keys; user programmable horizontal split screen; and video attributes (blink, blank, reduced intensity, reverse video, and non-destructive underline). Options include: extended keyboard (with 15-key numeric pad); one or three additional pages of memory; green or amber display; current loop interface; function key programming; composite video; and a tilt/swivel base. A new option recently added to the 630 terminals is the magnetic stripe card reader keyboard.

The high-end of TEC's Data-Screen family of terminals is the Series 570/670. Like the two series' previously discussed, this series consists of four models. Models 571 and 572 feature attached keyboards, and Models 671 and 672 feature detached keyboards. Models 571 and 671 are domestic models, while Models 572 and 672 have export compatibility. Standard features include: conversational or buffered operation; protected fields; full editing capabilities (same as 530/630); page or roll-up mode; seven function keys; monitor mode; and video attributes (blink, blank, reduced intensity, reverse video, non-destructive underline, and blank, alpha, and numeric only fields). Options include: extended keyboard (with 15-key numeric pad) for 670 Series only; separate 15-key numeric pad; one or two additional pages of memory, paging or scrolling; function key programming; auxiliary I/O port; auxiliary diagnostic test unit; light pen; buffered or non-buffered hard copy output; 96-character graphics set; non-glare screen filters; and a tilt/swivel base (Models 671 and 672 only).

TEC will customize all terminals, including keyboards, to meet OEM specifications.

Datapro received no responses from TEC terminal users in the 1981 alphanumeric display terminal survey, and TEC declined to provide us with user names; therefore, no User Reaction section appears in this report.□

SERIES 570/670—Also consists of four models. Models 571 and 572 feature attached keyboards, while Models 671 and 672 feature detached keyboards. Models 571 and 671 are domestic models, while Models 572 and 672 feature export power compatibility and international character sets. As with the previously mentioned 500 and 600 Series', these terminals are microprocessor-based, stand-alone, Teletype-compatible units with full editing capabilities, plus special features such as light pen support, graphics, and higher transmission speeds (up to 19,200 bps).

TRANSMISSION SPECIFICATIONS

All models transmit asynchronously in half- or full-duplex mode. The Series 70 features 15 selectable transmission rates from 50 to 9600 bps. Series 510/610 and 530/630 feature 8 selectable rates from 110 to 9600 bps. Series 570/670 features 16 selectable rates from 50 to 19,200 bps. Odd, even, or mark parity is standard. The 10 or 11 bit ASCII code is used. All models are equipped with an RS-232-C interface; a 20/60 mA current loop interface is optional, except for the 570/670, on which it is standard. Models 512, 612, 532, 632, 572, and 672 feature export power compatibility and line lock.

DEVICE CONTROL

SERIES 70: The basic terminal performs transmissions on a character-by-character basis as each key is depressed. Displayed data automatically rolls up as the screen is filled. Received and keyed commands execute carriage return, line feed, cursor positioning, etc. Cursor controls move the cursor up, down, left, right, and home. Cursor addressing and sensing are standard features. Eight program function keys are a standard feature. The keys generate all of the 32 ASCII control codes and can be redefined by the user. The special Function Key Programming option lets the user specify any ASCII code or Escape code sequence to be generated by the program function keys.

The Edit/Attribute Package, which is optional on the Model 70X and 70V, adds buffering, format protection, tabulation, editing, highlighting, and line clearing functions. Buffering supports page and line transmission. Format protection restricts data entry to unprotected fields in a displayed format. Unprotected fields or both protected and unprotected fields can be transmitted. Fields can be highlighted via dual intensity, blinking, and reverse video attributes; the blanking attribute can be used to obscure fields for security purposes. Edit functions include character and line insert and delete, and field, line, and page erasure. Tab and back tab functions are provided as well as automatic tabulation between fields within a protected format. The columnar tab function permits a tab stop to be set for each column. Tab clearing is also provided.

The Model 70C also provides a magnetic stripe card reader that reads cards encoded to the International Air Transport Association (IATA) standard. Up to 78 alphanumeric characters can be recorded on each card, but the terminal reads only the first 64 characters. Data read from the card is stored in the terminal's memory but is not displayed on the CRT.

SERIES 510/610, 530/630, & 570/670: Transmission is performed on a character-by-character basis as it is keyed, or on a buffered basis by line, page, or partial page. The terminals can also be set to send unprotected data only. Video attributes available on all models include blink, blank, non-destructive underline, reduced intensity, or reverse video. Each attribute can be selected on a character basis. Protected fields are available on all models; alpha only and numeric only field designations are available on the Series 570/670. Page or roll-up operation can be selected. A monitor mode is also available to facilitate software debugging.

TEC Data-Screen Display Terminals

Cursor controls include cursor up, down, left, right, home, return, load, and read. Cursor sensing and X-Y positioning are standard. The cursor appears as a blinking block (non-blinking in off-line mode) on the 510/610 and 530/630 models; a blinking block or blinking underline cursor is selectable on the 570/670 models.

Tab functions on the 510/610 include forwrd and back; tab functions on all other models include set, clear, forward, back, auto tab, and columnar tab. Edit functions on the 510/610 include clear screen and clear memory; edit functions on all other models include insert/delete character/line, erase to end of line/page, clear screen, clear memory, and software-controlled erase to spaces/nulls. Auto line feed on carriage return is selectable for the 530/630 and 570/670 models. All models feature one page of display memory. With optional additional pages of memory, scrolling is standard. Horizontal split screen is user programmable on the 530/630 models.

The magnetic stripe card reader, described above for use with the Model 70C, is also available on the Model 630-C.

COMPONENTS

CRT DISPLAY UNIT: A 12-inch (diagonally measured) CRT with a display capacity of 2000 characters in a 25-line by 80-character screen format. The Series 70 CRTs are pedestal-mount models. Characters are displayed in white (P4 phosphor) on a dark background. Green and amber characters are optionally available, as are non-glare filter kits. Characters on the Series 70 terminals are formed utilizing a 5 x 7 dot matrix in an 8 x 10 field. Characters on all other models are formed utilizing a 6 x 8 dot matrix in an 8 x 10 field. The Series 70 and Series 570/670 display the 128-character ASCII set (upper/lower case). The Series 510/610 and 530/630 display the 96-character ASCII set (upper/lower case). International character sets are standard on export models (512, 612, 532, 632, 572, and 672). A light pen is optional on the Series 570/670. A tilt/swivel display base is standard on the Series 70 and optional on all other models.

SERIES 70 KEYBOARD: An 81-key, typewriter-style, detachable keyboard. The keyboard includes eight program function keys, and a control key pad. A numeric pad is standard on the Model 70C and optional on all other models. The keyboard on the Model 70C also includes a magnetic stripe card reader. The cards are read by sliding them into an opening at the rear of the keyboard.

500 SERIES KEYBOARDS: All 500 series keyboards are attached, with typewriter-style layouts. Models 511 and 512 feature 60 keys, including a repeat key, integral numeric pad, and software-controlled lock/unlock. A separate, detached numeric pad is optionally available.

Models 531 and 532 feature an 81-key keyboard. All keys are typamatic. Cursor control and edit clusters are included, as are six function keys. Local, remote, TTY lock, break, and enter control keys are also included, and software-controlled lock/unlock is standard. A separate, detached numeric pad is optionally available.

Models 571 and 572 feature a 79-key keyboard. All keys are typamatic. All features are the same as for the 531 and 532, except that seven function keys are included.

600 SERIES KEYBOARDS: All 600 series keyboards are detached, with typewriter-style layouts. An extended keyboard with a 15-key numeric pad is optionally available on all models. Otherwise, the 600 series keyboards contain the same features as their 500 series counterparts.

Models 631 and 632 can be equipped with a magnetic stripe card reader keyboard.

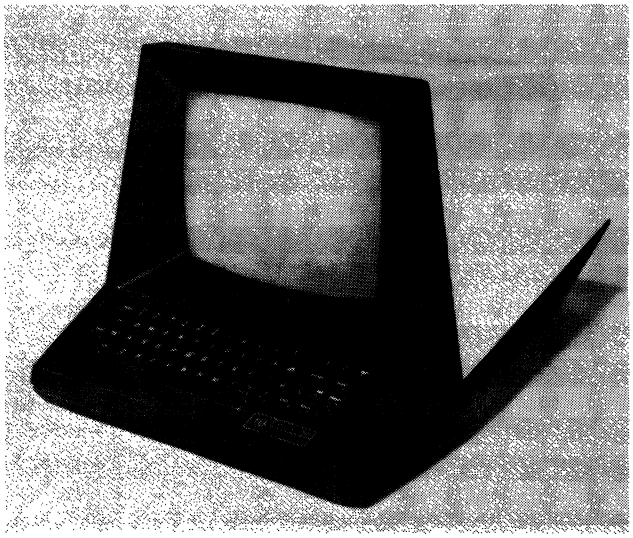
PRICING

The TEC terminals are available on a purchase basis only. End-user and OEM quantity discounts are provided, as well as special discounts for distributors, government agencies, and educational institutions. The terminals are covered under a 90-day warranty. Factory service is provided by TEC.

For some of the models on the following price list, a range of prices is given, reflecting some of the options offered.

	Purchase Price
Series 70	
Model 70A	$1,900
Model 70C	3,100
Model 70U	2,642
Model 70V	1,854
Model 70X	1,900
Series 510/610	
Models 511/512	700-925
Models 611/612	748-1,081
Series 530/630	
Models 531/532	700-1,040
Models 631/632	750-1,140
Models 631-C/632-C	1,975
Series 570/670	
Models 571/572	1,115-1,425
Models 671/672	1,170-1,370■

TEC, Inc. Alphanumeric Display Terminals



The TEC Model 501 provides a teletypewriter-style keyboard, cursor sensing and addressing, a page or roll-up mode, and switch-selectable transmission rates.

A family of stand-alone, Teletype-compatible display terminals that includes basic models designed strictly for Teletype emulation and models with full editing capabilities.

Standard features include asynchronous transmission at 50 to 9600 or 19,200 bits/second, 126 or 128 displayable ASCII characters, cursor addressing and sensing, and full cursor control. Some models feature full editing, format protection, and optional paging.

Purchase prices range from $983 to $3,100 (end user) or $922 to $2,508 (OEM). Quantity discounts are provided.

MANAGEMENT SUMMARY

TEC, Inc. currently manufactures 11 models of microprocessor-based, Teletype-compatible display terminals. The Series 70 includes five models that are mounted on a pedestal and can be tilted or swiveled for the operator's convenience. A detached keyboard is separately priced. The Series 500 includes six desk-mounted models with integral keyboards.

The Model 501 is designed strictly for Teletype emulation. The Model 503 is an ADDS 580-compatible terminal. Both terminals feature full cursor controls, cursor sensing and addressing, and a keyboard with repeatable key functions. A numeric keypad is optional. Models 502 and 504 are export versions of the 501 and 503, respectively, and provide a 230 VAC/50-Hertz power supply and international keyboards.

Most Series 70 models and the Model 571 provide full editing, format protection, field highlighting attributes, tabulation, program function keys, and the capability to transmit a line, a page, or a partial page of data at a time. The Model 572 is an export version of the Model 571.

The Model 70X can be equipped with up to three pages of display memory. A special option lets the user specify any ASCII code or Escape code to be transmitted via the program function keys.

All models are equipped with an RS-232C modem interface and a TTL interface; a current loop interface is standard on the Model 571 and optional on all other models. The Series 70 and the Model 571 provide an auxiliary I/O port and an optional printer port. An ➢

CHARACTERISTICS

VENDOR: TEC, Inc., 2727 N. Fairfield Avenue, Tucson, Arizona 85705. Telephone (602) 792-2230.

DATE OF ANNOUNCEMENT: Series 70—June 1977; Series 500—April 1978.

DATE OF FIRST DELIVERY: Series 70—August 1977; Series 500—July 1978.

NUMBER DELIVERED TO DATE: Information not available.

SERVICED BY: TEC factory service.

MODELS

Eleven models are available: Models 70A, 70C, 70U, 70V, 70X, 501, 502, 503, 504, 571, and 572. The 70X is the standard Series 70 terminal. The 70A is TEC 2401/2402-compatible, the 70U is Uniscope 100/200-compatible, and the 70V is DEC VT-52-compatible. The 70C is equipped with a keyboard that includes a magnetic stripe card reader. All Series 70 models are microprocessor-based, stand-alone, Teletype-compatible display terminals that consist of a pedestal-mounted CRT monitor, which swivels horizontally and tilts vertically, and a detachable keyboard. The Series 70 terminals feature an Intel 8080A microprocessor, one switchable auxiliary RS-232C I/O port, and a composite video output for attaching remote monitors. A serial RS-232C and parallel printer interface is optional on the Series 70.

The 500 Series terminals are microprocessor-based display units with integral keyboards. Models 501 and 503 are basically the same, except that the 501 is compatible with the Lear Siegler ADM-3A terminal and the 503 is compatible with the ADDS 580 and the Regent 100 terminals. Models 502 and 504 are special export verisons of the 501 and 503, respectively. The Model 571 is a buffered conversational terminal that offers more extensive editing and operating features than the other models in the 500 series. The Model 572 is an export version of the 571. ➢

TEC, Inc. Alphanumeric Display Terminals

additional buffered printer interface is optional on the Model 571.

USER REACTION

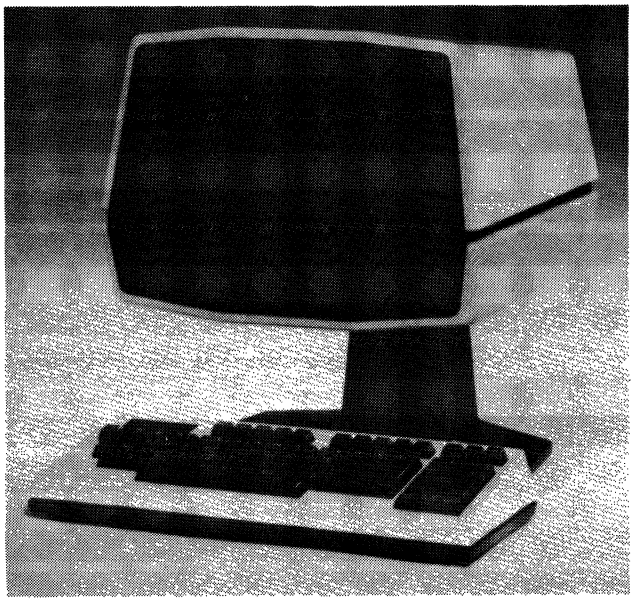
Only two users of the TEC terminals responded to Datapro's 1979 survey of alphanumeric display terminal users. In June 1979, we contacted four additional users, whose names were supplied by TEC. These six users had a total of 2 Series 70 terminals, 15 Model 501 terminals, and 40 500 Series terminals for which the exact model was not specified. The users' ratings are summarized in the table below.

	Excellent	Good	Fair	Poor	WA*
Overall performance	0	6	0	0	3.0
Ease of operation	3	3	0	0	3.5
Display clarity	2	4	0	0	3.3
Keyboard feel & usability	1	5	0	0	3.2
Hardware reliability	0	3	3	0	2.5
Maintenance service	1	1	2	0	2.7
Technical support	1	4	1	0	3.0

*Weighted Average on a scale of 4.0 for Excellent.

The users cited cost (four users) and physical size (two users) as the key advantages of the 500 Series terminals. One Series 70 user mentioned the Edit/Attribute package as one of the terminal's main strengths. One user was impressed with TEC because the company seemed to care about the end user, regardless of the number of units purchased. Another user reported receiving good support from TEC when he wanted to change some key functions on the Series 70.

The only problems reported were key switch failures on two units and circuit board problems on one unit. After the switches and circuit board were replaced, the users experienced no further problems.□



The TEC Series 70 is available in five models that offer paging, full editing, and format protection.

TRANSMISSION SPECIFICATIONS

All TEC terminals transmit asynchronously in half- or full-duplex mode. The Model 70U is also capable of synchronous transmission. The Model 571 provides 16 switch-selectable speeds from 50 to 19,200 bits/second. All other models offer 15 selectable speeds from 50 to 9600 bits/second. The 8-level, 10- or 11-bit ASCII code is used. Odd, even, or mark parity is switch-selectable. All models are equipped with an RS-232C modem interface, and a TTL interface. A 20 or 60 mA current loop interface is standard on the Model 571 and optional on the other models. TEC currently offers Honeywell and Sperry Univac protocols.

DEVICE CONTROL

SERIES 70: The basic terminal performs transmissions on a character-by-character basis as each key is depressed. Displayed data automatically rolls up as the screen is filled. Block transmission is standard on the Model 70A, 70C, and 70U, and on the 70X when purchased in OEM quantities of 25 or more. With this feature, a line, a page, or a partial page can be transmitted. Received and keyed commands execute carriage return, line feed, cursor positioning, etc. Cursor controls move the cursor up, down, left, right, and home. Cursor addressing and sensing are standard features. Eight program function keys are a standard feature. The keys generate all of the 32 ASCII control codes and can be redefined by the user. The special Function Key Programming option lets the user specify any ASCII code or Escape code sequence to be generated by the program function keys.

The Edit/Attribute Package, which is optional on the Model 70X and 70V, adds buffering, format protection, tabulation, editing, highlighting, and line clearing functions. Buffering supports page and line transmission. Format protection restricts data entry to unprotected fields in a displayed format. Unprotected fields or both protected and unprotected fields can be transmitted. Fields can be highlighted via dual intensity, blinking, and reverse video attributes; the blanking attribute can be used to obscure fields for security purposes. Edit functions include character and line insert and delete, and field, line, and page erasure. Tab and back tab functions are provided as well as automatic tabulation between fields within a protected format. The columnar tab function permits a tab stop to be set for each column. Tab clearing is also provided.

The Model 70X Paging option adds one or two additional pages of display memory. Data is accessed via a page switch function. Operating status is displayed by the optional Data Panel, a panel containing 16 indicator lamps embedded in the bottom edge of the CRT monitor bezel. The lamps are user-program-defined and can be labeled at the factory if specified.

The Model 70C also provides a magnetic stripe card reader that reads cards encoded to the International Air Transport Association (IATA) standard. Up to 78 alphanumeric characters can be recorded on each card, but the terminal reads only the first 64 characters. Data read from the card is stored in the terminal's memory but is not displayed on the CRT.

MODEL 501/503: Data is transmitted on a character-by-character basis. Displayed data automatically rolls up as the screen is filled. Cursor wraparound can also be selected. The terminal features automatic carriage return, automatic line feed, and cursor addressing and positioning. Cursor controls move the cursor up, down, left, right, and home. A Monitor mode permits the display of ASCII control codes. Upper/lower case alphabetics are standard; an alternate-action switch permits data to be displayed in upper-case characters only. A Local mode allows the operator to practice data entry without transmitting the data.

TEC, Inc. Alphanumeric Display Terminals

MODEL 571: Data can be transmitted by line, by page, or by partial page. Switch-selectable space code suppression during transmission and automatic transmission of the carriage return code at the end of a line are standard features. Cursor controls include up, down, left, right, home, return, load, and read. A Monitor mode provides for the display of ASCII control codes.

Editing functions include character and line insertion or deletion and space, line, and page erasure. Forward and backward tab functions are provided. Data entry can be restricted to unprotected fields for format protection. Highlighting features include blinking, reverse video, dual intensity, blanking, and non-destructive underlining. Paging with scrolling and self test features are optional.

COMPONENTS

CRT DISPLAY UNIT: A 12-inch (diagonal measurement) CRT with a viewing area 7.5 inches high by 9.5 inches wide. The display arrangement is 25 lines of 80 characters each for a total of 2000 display positions. The character set contains 126 displayable ASCII symbols (128 on the Model 571) including upper and lower case alphabetics, numerics, specials, control codes, and lines and bars for generating charts, graphs and formats. Each character is formed within an 8-by-10 dot matrix character cell on all models except the 571, which uses a 6-by-8 dot matrix. Data is displayed in white (P4) or in green (P31-optional). Highlighting is optional and includes dual intensity, reverse video, blinking, and blanking.

SERIES 70 KEYBOARD: An 81-key, typewriter-style, detachable keyboard. The keyboard includes eight program function keys, and a control key pad. A numeric pad is standard on the Model 70C and optional on all other models. Standard key functions include Return, Line Feed, Repeat, Rub Out, Break, Clear Memory, Clear Screen, Remote, Local, Enter, Teletype Lock, Shift, Shift Lock, Control Shift, Space, and five cursor controls. The Teletype Lock shifts the keyboard to upper case except for numerics. Optional key functions include Tab, Back Tab, Clear Tab, Delete Character, Insert Character, Delete Line, Insert Line, Clear End of Page, and Clear End of Line. The keyboard generates any of 128 ASCII character codes. All keys are repeatable.

The keyboard on the Model 70C also includes a magnetic stripe card reader. The cards are read by sliding them into an opening at the rear of the keyboard.

SERIES 500 KEYBOARDS: All models in the 500 series feature non-detachable keyboards with optional 15-key numeric pads. The Model 501/503 is equipped with a 59-key, teletypewriter-style keyboard. The Model 571 features a 79-key, typewriter-style keyboard with separate cursor control and editing key clusters. The keyboard includes seven function keys and most of the standard function keys included on the Series 70. All keys are repeatable.

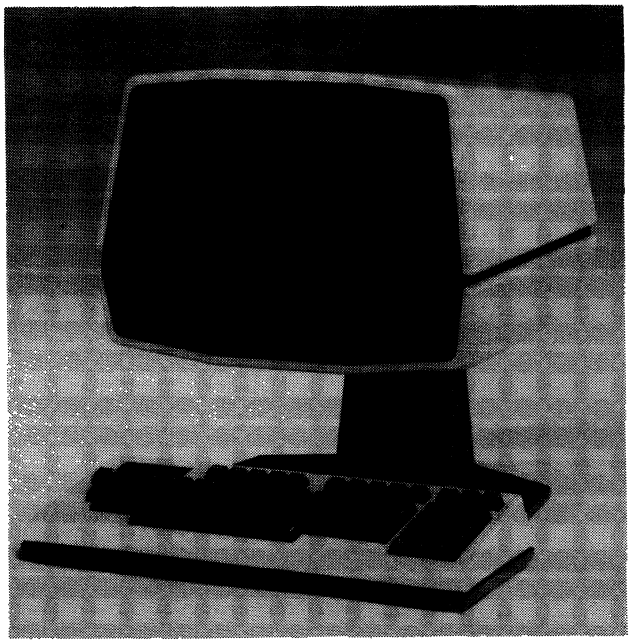
PRICING

The TEC terminals are available on a purchase basis only. End-user and OEM quantity discounts are provided, as well as special discounts for distributors, government agencies, and educational institutions. The terminals are covered under a 90-day warranty. Factory service is provided by TEC.

	End-User Prices	OEM Prices*
Series 70		
Pedestal mounted terminals without keyboard:		
Model 70A	$1,404	$1,314
Model 70C	3,100	2,508
Model 70U	2,642	2,050
Model 70V	1,854	1,480
Model 70X	1,404	1,324
Options:		
Monitor, green phosphor (P31)	43	36
Keyboard	267	258
Keyboard with numeric pad	324	319
Buffered printer interface (RS-232C)	194	175
Current loop interface, 20/60 mA	39	26
Edit/Attribute Option Package (70X, 70V only; standard on other models)	242	NC
Paging, 1 additional (70X only)	348	319
Paging, 2 additional (70X only)	460	422
Special Function Key Programming	73	52
Data Panel, without legends	195	175
Data Panel, with legends	242	227
Series 500		
Model 501/503:		
Desk mount with standard keyboard; ADM-3A compatible	983	922
Desk mount with standard keyboard; ADDS 580 & Regent 100 compatible	1,049	984
Monitor, green non-glare (P31)	49	46
Numeric keypad	82	77
Auxiliary I/O port	44	41
Current loop interface	44	41
Remote composite video output	44	41
Model 571:		
Desk mount with keyboard	1,425	1,325
Monitor, green phosphor (P31)	49	46
15-key numeric pad	82	77

*For quantities of 1 to 25 units. Contact vendor for prices on quantities of 25 or more.■

TEC, Inc. Micro-TEC Model 70 Display Terminal



A stand-alone, Teletype-compatible keyboard/display terminal loaded with features for point-to-point or multipoint operation.

Standard features include microprocessor control, 15 switch-selectable rates from 50 to 9600 bps, 128 ASCII displayable symbols, cursor addressing and sensing, eight program function keys, and full cursor control. Options include paging, up to three pages of display memory, full editing, tabulation, format protection, numeric pad, and multi-point operation.

The basic terminal sells for $1,725 (end-user) or $1,535 (OEM). A fully expanded terminal sells for $3,080 (end user) or $2,700 (OEM). Quantity discounts are provided.

MANAGEMENT SUMMARY

The Micro-TEC 70 is the first microprocessor-based display terminal to be produced by TEC, Inc., a leading manufacturer of a complete family of Teletype-compatible display terminals. The terminal, equipped with an Intel 8080 microprocessor, is designed for operator convenience. The CRT monitor is mounted on a pedestal and can be tilted or swiveled to suit the operator. A separate keyboard can be located in any position. The terminal is also available in a rack-mounted version.

The basic terminal is designed strictly for Teletype emulation without any fancy frills. However, it does feature full cursor controls, cursor sensing and addressing, eight program function keys, and a repeatable keyboard. A numeric keypad is optional.

A firmware option equips the terminal with format protection, field highlighting attributes, full editing, tabulation, and the capability to transmit a line or page of data at a time. Additional options add columnar tabulation and paging. The terminal can be equipped with up to three pages of display memory. A special option lets the user specify which of 32 ASCII codes are transmitted via the program function keys.

The basic terminal is equipped with a modem interface and an unbuffered serial I/O interface for attaching a cassette tape drive, diskette, or printer. A buffered printer interface is optional.

Transmission options include a synchronous interface, a current loop interface, and a polling interface for multi- ➢

CHARACTERISTICS

VENDOR: TEC, Inc., 2727 N. Fairfield Avenue, Tucson, Arizona 85705. Telephone (602) 792-2230.

DATE OF ANNOUNCEMENT: June 1977.

DATE OF FIRST DELIVERY: August 1977.

NUMBER DELIVERED TO DATE: 80.

SERVICED BY: Sorbus and TEC factory service.

MODELS

The Micro-TEC 70 is a microprocessor-based, stand-alone, Teletype-compatible display terminal that consists of a pedestal-mounted CRT monitor that swivels horizontally and tilts vertically, and a detachable keyboard. The terminal is also available in a rack-mounted version. The standard terminal features an Intel 8080 microprocessor, two switchable RS-232C I/O ports, and a composite video output for attaching remote monitors. A buffered RS-232C printer interface is optional.

TRANSMISSION SPECIFICATIONS

Transmission is asynchronous half- or full-duplex at 15 switch-selectable speeds from 50 to 9600 bits/second. A synchronous interface is optional. The 8-level, 10- or 11-unit ASCII code is used. Odd or even parity or marking is switchable. The terminal is equipped with an RS-232C modem interface; a 20 or 60 ma dc loop interface is optional. The terminal can be equipped for multi-point operation via an optional polling interface. TEC currently offers Burroughs, Honeywell, and Univac protocols.

DEVICE CONTROL

The basic terminal performs transmissions on a character-by-character basis as each key is depressed. Displayed data automatically rolls up as the screen is filled. Block transmission is optional. With the option, a line or page can be transmitted. Received and keyed commands execute carriage return, line feed, cursor positioning, etc. Cursor controls ➢

TEC, Inc. Micro-TEC Model 70 Display Terminal

point operation. The polling interface is available with Burroughs, Honeywell, or Univac protocol.

At the user's option, a set of 16 indicator lamps can be added to indicate terminal operation status.

Salient features of the expanded version include:

- 15 switch-selectable data rates from 50 to 9600 bps.
- Character, line, or page transmission.
- Cursor addressing and sensing.
- Full cursor control.
- Full edit capability.
- Format protection for data entry applications.
- Tabulation between tab settings or unprotected fields.
- Display of control codes via representative special symbols.
- Line drawing and charting symbols.
- Display and keyboard operation of upper-case only or upper and lower case ASCII characters via switch selection.
- A 2000-character screen.
- Storage for up to 3 full 2000-character pages.
- Dual intensity, blinking, blanking, and reverse video attributes.
- Repeatable keys.
- Numeric pad.
- RS-232C or 20/60 ma dc communications interface.
- Synchronous communications.
- Multipoint operation. □

move the cursor up, down, left, right, and home. Cursor addressing and sensing are standard features. Eight program function keys are a standard feature. The keys generate all of the 32 ASCII control codes and are defined by user programs. The special Function Key Programming option lets the user specify any 32 ASCII codes to be generated by the program function keys.

The Edit/Attribute Option Package adds buffering, format protection, tabulation, editing, and highlighting functions. Buffering supports page and line transmission. Format protection restricts data entry to unprotected fields in a displayed format. Unprotected fields or both protected and unprotected fields can be transmitted. Fields can be highlighted via dual intensity, blinking, and reverse video attributes; the blanking attribute can be used to obscure fields for security purposes. Edit functions include character and line insert and delete, and field, line, and page erasure. Tab and back tab functions are provided as well as automatic tabulation between fields within a protected format.

The Columnar Tab option permits a tab stop to be set for each column. The optional also includes tab clearing.

The Paging option adds one or two additional pages of display memory. Data is accessed via a scroll function. Operating status is displayed by the optional Data Panel, a panel containing 16 indicator lamps embedded in the bottom edge of the CRT monitor bezel. The lamps are user-program-defined and can be labeled at the factory if specified.

COMPONENTS

CRT DISPLAY UNIT: A 12-inch (diagonal measurement) CRT with a viewing area 7.5 inches high by 9.5 inches wide. The display arrangement is 25 lines of 80 characters each for a total of 2000 display positions. The character set contains 126 displayable ASCII symbols including upper and lower case alphabetics, numerics, specials, control codes, and lines and bars for generating charts, graphs and formats. Each character is formed within an 8-by-10 dot matrix character cell. Data is displayed in white (P4) or in green (P31-optional). Highlighting is optional and includes dual intensity, reverse video, blinking, and blanking.

KEYBOARD: An 81-key, typewriter-style, detachable keyboard. The keyboard includes eight program function keys, and a control key pad. A numeric pad is optional. Standard key functions include Return, Line Feed, Repeat, Rub Out, Break, Clear Memory, Clear Screen, Remote, Local, Enter, Teletype Lock, Shift, Shift Lock, Control Shift, Space, and five cursor controls. The Teletype Lock shifts the keyboard to upper case except for numerics. Optional key functions include Tab, Back Tab, Clear Tab, Delete Character Insert Character, Delete Line, Insert Line, Clear End of Page, and Clear End of Line. The keyboard generates any of 128 ASCII character codes. All keys are repeatable.

PRICING

The Micro-TEC 70 is available on a purchase basis only. End-user and OEM quantity discounts are provided, as well as special discounts for distributors, government, and education. The terminal is covered under a 90-day warranty. Factory service is provided by TEC; on-site service is provided by Sorbus and is priced at $25 per month per terminal.

TEC, Inc. Micro-TEC Model 70 Display Terminal

End-User Prices

	Purchase			
	1-25 Units	26-50 Units	51-100 Units	100+ Units
Micro-TEC 70, pedestal mount without keyboard	1,450	1,385	1,320	1,280
Micro-TEC 70, rack mount without keyboard	1,540	1,470	1,400	1,355
Monitor, green phosphor (P31)	45	40	35	30
Buffered Printer Interface (RS-232C)	165	160	155	150
Keyboard	275	265	255	245
Keyboard with numeric pad	335	325	315	305
Edit/Attribute Option Package	250	240	230	220
Paging, per page (1 or 2 additional)	240	230	220	210
Columnar Tab	100	95	90	85
Synchronous Communications Interface	240	230	220	210
Polling Interface	240	230	220	210
Current Loop Interface, 20/60 ma	40	35	30	25
Special Function Key Programming	75	70	65	60
Data-Panel, without legends	240	230	220	210
Data-Panel, with legends	255	245	235	225

OEM Prices

	Purchase				
	1-5 Units	6-50 Units	51-100 Units	101-250 Units	251-500 Units
Micro-TEC 70, pedestal mount without keyboard	$1,285	$1,220	$1,155	$1,090	$1,060
Micro-TEC 70, rack mount without keyboard	1,360	1,290	1,220	1,150	1,115
Monitor, green phosphor (P31)	35	30	30	30	30
Buffered Printer Interface (RS-232C)	130	125	120	115	110
Keyboard	250	240	230	220	210
Keyboard with numeric pad	310	300	290	280	270
Edit/Attribute Option Package	200	195	190	185	180
Paging, per page (1 or 2 additional)	200	195	190	185	180
Columnar Tab	75	70	65	60	55
Synchronous Communications Interface	200	195	190	185	180
Polling Interface	200	195	190	185	180
Current Loop Interface (20/60 ma)	25	20	20	20	20
Special Function Key Programming	50	45	45	45	45
Data-Panel, without legends	200	190	180	170	160
Data-Panel, with legends	215	205	205	185	175