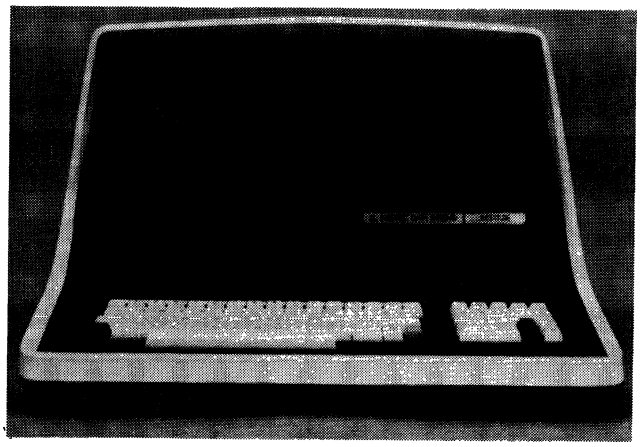
Intertec Intertube II



A low-cost data entry/editing terminal.

Features include a 12-inch 2000-character display; teletypewriter-style keyboard; conversational, message, or page transmission at speeds up to 9600 bps; field protection and support for formatted data entry; an 11-character line drawing set; and an auxiliary interface for attachment of a printer or other I/O device.

A DEC VT-52 emulation package is offered as an option.

The Intertube II is available for purchase only. The basic terminal is priced at $995 (single-quantity, end-user); the VT-52 option costs $100.

MANAGEMENT SUMMARY

The Intertube II is a desktop keyboard/display terminal designed for inquiry/response and data entry applications and controlled by a Z-80 microprocessor. It is the first of three display terminals offered by Intertec; the other two are user-programmable units. The Intertube II supersedes the original Intertube; it offers more functional flexibility than the older model, a new component layout, a switching-type power supply that minimizes heat generation, and a single-board electronics card that includes the keyboard encoder, microprocessor, RAM/ROM memories, and communications interface circuitry. Optional software packages provide emulation of DEC's VT-52 display terminal, as well as other teletypewriter-compatible terminals.

The Intertube II employs a modular construction designed to simplify servicing. Any one of the three basic component modules—keyboard/processor, video monitor, or power supply—can be removed for repair without disrupting the other modules.

Although at the current time Intertec offers only factory repair service (except for those dealers who provide on-site service for their own customers), the company is actively negotiating with several service organizations to provide nationwide third-party on-site maintenance service.

The most remarkable aspect of this terminal is certainly its price: $995 (single-quantity end-user). Although it must be said that some of the terminal's features have been implemented in a way that might be judged slightly less convenient for the operator (such as use of command/control sequences instead of dedicated keys for certain functions), or that might provide slightly less flexibility (such as limitations on the forms creation capabilities), functions are for the most part comparable to the ADDS Regent 200, Beehive DM20, Lear Siegler ADM1A, Hazeltine 1520, and Infoton I-400, all of which retail in the $1,400 to $1,600 range. Certainly some users will consider these minor trade-offs in convenience well worth a 30 to 40 percent reduction in price.

CHARACTERISTICS

VENDOR: Intertec Data Systems, 2300 Broad River Road, Columbia, South Carolina 29210. Telephone (803) 798-9100.

DATE OF ANNOUNCEMENT: Intertube—May 1978; Intertube II—March 1979.

DATE OF FIRST DELIVERY: Intertube—September 1978; Intertube II—March 1979.

NUMBER DELIVERED TO DATE: 6,000 (both models).

SERVICED BY: Intertec Data Systems and third party.

CONFIGURATION

The Intertube II is a desktop keyboard/display terminal controlled by a Z-80 microprocessor. The terminal's construction consists of three component modules—keyboard/processor, video monitor, and power supply—that are removable and replaceable for servicing.

TRANSMISSION SPECIFICATIONS

Transmission is serial asynchronous half- or full-duplex via an RS-232C communications port. A European voltage package (230 VAC/50 Hz) is optional. Transmission rates are 50, 75, 110, 134.8, 150, 300, 600, 1200, 1800, 2000, 2400, 3600, 4800, 7200, or 9600 bps. A choice of odd or even parity or a space or mark condition is provided. All communications parameters are keyboard-selectable.

A VT-52 emulation package is available as an option. Other emulation packages are made available on an "as required" basis.

A buffered serial RS-232C auxiliary port is provided as a standard feature. Transmission rates for the auxiliary port can be selected independently of the main terminal communications port.

DEVICE CONTROL

The Intertube II is designed for inquiry/response and data entry applications. Data can be transmitted in Conversational (character-by-character), Message (a line at a time), or Page (a full or partially-full screen at a time) Mode. The Local Mode permits the operator to key data off-line into the

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The company attributes its ability to offer its product at such a low price to several factors, including: in-house design and production of much of the terminal's componentry, including the power supply, microprocessor, and cabinetry (the keyboard and monitor are currently purchased from other manufacturers), which permits the company to have direct control over scheduling, quality, and costs; the interchangeability of major components, such as cabinetry, with its other two terminal products; and the substantially lower overhead achieved by locating its manufacturing facilities in South Carolina, which provides some attractive incentives to encourage new business development.

Considering its price/performance ratio, the Intertube II seems to be well worth investigation.□

display memory while the communications interface maintains on-line status with the host.

The operator can move the cursor up, down, left, right, or home. The cursor is addressable using either of two addressing schemes: discrete addressing, in which the horizontal and vertical locations of the cursor are addressed in separate commands; or absolute addressing, in which the cursor is addressed in a single command containing row/column coordinates. The cursor is also readable by the host.

Upward scrolling is automatic when the bottom line of the display is filled; the top line is lost as it scrolls off the screen.

A number of text editing functions are provided to support formatted or unformatted data entry. Fields can be designated as protected or unprotected, and highlighted using blinking, reverse video, and half intensity visual attributes. A forward tab can be used to move the cursor to the beginning of the next unprotected field. Editing functions, which are operational only in Page Mode, include character and line insertion and deletion. Erase functions permit erasure to the end of a line or page. The entire screen, protected fields only, or unprotected fields only, can be cleared or transmitted.

An 11-character line drawing set can be used to display a form on the screen. Forms creation capabilities are limited to (1) character-by-character transmission in Conversational Mode of command sequences for line drawing characters, field protection, tabulation, and visual attribute designation or (2) transmission in Page Mode of a completed form exactly as it appears on the screen (since escape/control characters are not transmitted in Page Mode, field protection and non-displayed forms characteristics specified by command code sequences cannot be incorporated into the form).

A local print function permits the operator to select which data (protected only, unprotected only, or all data) is to be transmitted to an attached printer or other auxiliary device.

A self-test scheme checks the overall performance of the terminal and prints a test pattern on the screen.

A special Gold Key permits generation of 128 different user-defined command sequences using one of the ASCII codes available on the terminal. These sequences are transmitted to the host to initiate programmed functions or identify data at the host end.

A special Red Key allows the operator to select the various operating parameters (i.e., communications configuration, transmission mode, self-test initiation, data entry specifications, and printer interfacing) by activating alternate functions for the top row of keys. For operator convenience, a keyboard label is provided immediately above the top row of keys to identify the alternate functions (operating functions and F1 through F14) of these keys when used in conjunction with the Red or Gold keys.

COMPONENTS

KEYBOARD: An 80-key teletypewriter-style keyboard. An 18-key numeric/control cluster is located to the right of the main keygroup. Cursor controls are embedded within the main keygroup. The 128-character ASCII set is standard. Special Red and Gold keys permit alternate use of keys in the main keygroup to generate 14 configuration/operation commands (top row of keys only) or 128 user-defined program function sequences (all keys). All keys are typamatic.

DISPLAY: A 12-inch monitor with a screen capacity of 25 lines of 80 characters. The 25th line displays terminal configuration and status information in half intensity reverse video when not used to display data. 96 ASCII characters are displayable, including upper and lower case alphabetics with true below-the-line descenders. Characters are formed by an 8-by-8 dot matrix in an 8-by-10 dot field. An 11-character graphics set is provided for forms design/display. Data is displayed in white on a dark background; the reverse video function displays black data on a white background. Data can be blinked and/or shown in reverse video or half intensity. The cursor is a reversed image block.

PRICING

The Intertec Intertube II is available for purchase only. Educational, OEM, and dealer discounts are available.

The regular factory warranty provides coverage for 90 days. A renewable Extended Factory Warranty is available to provide coverage for a full one-year term and offers "loaner" component modules to minimize downtime while the customer's parts are at the factory for repair or replacement. The annual charge for the Extended Warranty is 15% of the purchase price of the terminal. The Factory Module Exchange program permits customers (generally large-quantity users with on-site technical personnel) to purchase component modules as spare parts; if breakdowns occur, malfunctioning parts can be replaced almost immediately (factory repairs and replacements are billed only if the parts in question are not covered by the regular or Extended Warranty).

Certain Intertec dealers and distributors currently provide on-site maintenance service. Intertec is currently negotiating with several service organizations to provide nationwide third-party on-site maintenance service.

	End-User Purchase Prices
1-4 Units	$995
5-23 units	945
24-49 units	895
50-99 units	850
100-249 units	800
250-499 units	750
500-999 units	700
1000+ units	650
Options	
VT-52 emulator	100
European voltage package	100 ■