

# Alphanumeric Display Terminals Addendum

The following pages provide information on 30 additional display terminal models from 16 vendors. Most of these models were introduced by the vendors after the original survey report was published. For your convenience, we have listed below the full names, addresses, and telephone numbers of all 16 vendors whose products are listed in this addendum. Please note that many of these vendors are also listed in the original report.

**Applied Digital Data Systems, Inc. (ADDS)**, 100 Marcus Boulevard, Hauppauge, NY 11787. Telephone (516) 231-5400.

**Burroughs Corporation**, Burroughs Place, Detroit, MI 48232. Telephone (313) 972-7000.

**CIE Terminals, Inc.**, (subsidiary of C. Itoh Electronics), 2505 McCabe Way, Irvine, CA 92714-6297. Telephone (714) 660-1421.

**Esprit Systems, Inc.**, Hazeltine Terminals Division, 100 Marcus Drive, Melville, NY 11747. Telephone (516) 293-5600.

**Falco Data Products, Inc.**, 1286 Lawrence Station Road, Sunnyvale, CA 94086. Telephone (408) 745-7123.

**Harris Corporation**, Information Terminals Group, 16001 Dallas Parkway, P.O. Box 400010, Dallas, TX 75240. Telephone (214) 386-2000.

**International Business Machines Corporation (IBM)**, Information Systems Group, National Accounts Division, 1133 Westchester Avenue, White Plains, NY 10604. Telephone (914) 696-1900.

**International Business Machines Corporation (IBM)**, Information Systems Group, National Marketing Division, 4111 Northside Parkway, Atlanta, GA 30327. Telephone (404) 238-2000.

**Lear Siegler, Inc.**, Data Products Division, 714 North Brookhurst Street, Anaheim, CA 92803. Telephone (714) 774-1010.

**Nabu Commercial Terminals**, (formerly Volker-Craig), 330 Weber Street North, Waterloo, Ontario, Canada N2J 3H6. Telephone (519) 884-9300.

**Peripheral Technology, Inc.**, 14784 N.E. 95th, Redmond, WA 98052. Telephone (206) 881-6691.

**Protocol Computers, Inc.**, 6150 Conoga Avenue, Suite 100, Woodland Hills, CA 91367-3773. Telephone (213) 716-5500.

**Racal-Milgo, Incorporated**, Computer Products Division, 6250 N.W. 27th Way, Ft. Lauderdale, FL 33309. Telephone (305) 979-4000.

**Teleray, Division of Research Incorporated**, P.O. Box 24064, Minneapolis, MN 55424, Telephone (612) 941-3300.



*Lear Siegler's new ADM 11 sports the company's new ergonomic styling, featuring a tilt/swivel display and low-profile keyboard.*

**Teletype Corporation**, 5555 Touhy Avenue, Skokie, IL 60077. Telephone (312) 982-2000.

**TeleVideo Systems, Incorporated**, 1170 Morse Avenue, Sunnyvale, CA 94086. Telephone (408) 745-7760.

**Wyse Technology, Inc.**, 3040 North First Street, San Jose, CA 95143. Telephone (408) 946-3075. □



*The IBM 3178 Display Station is a small-screen, small-footprint version of the successful 3278 Model 2. Several independent 3270-compatible vendors have already introduced competitive models.*



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VENDOR AND MODEL	CIE Terminals CIT-101e	Esprit Systems (Hazeltine) Esprit III Color	Esprit Systems (Hazeltine) Executive 10/51	Esprit Systems (Hazeltine) Executive 10/78	Falco Condor-2
<b>TERMINAL DESCRIPTION</b> Stand-alone or cluster Maximum displays/controller Transportability IBM compatibility Teletype compatibility Other compatibility	Stand-alone 1 No No Std. DEC VT52/VT100/ VT101/VT102	Stand-alone 1 No No Std. —	Stand-alone — No 5251 Std. —	Stand-alone — No 3278 Std. —	Stand-alone 1 No No Std. Lear Siegler ADM 31
<b>DISPLAY PARAMETERS</b> Display capacity, no. of chars. Memory capacity, no. char./lines/pages Screen arrangement, lines x chars./line	3168 80 or 132/24/1 24/132 x 80	1920 — 24 x 80 plus status line	1920 — 24 x 80 plus status line	1920 — 24 x 80 plus status line	1920 — 24 x 80
Screen area, diagonal, inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor	14 Std. 96 ASCII 7 x 9 dot matrix P4 white std.; green/amber opt. No	13 Tilt std. 128 ASCII + graphics 7 x 11 dot matrix Color screen	12 Std. 124 ASCII 7 x 10 dot matrix P146 green	12 Std. 124 ASCII 7 x 10 dot matrix P146 green	12 — 128 ASCII + graphics 7 x 9 dot matrix P31 green std.; P4 wh., PC134 amb. opt. No
Color capability Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase	No Std. Std. No Std. Std. No Std. No Std. Both std. No No 3 std. Fwd./back std. No No Line/screen/char./ window	8 colors std. No No Dim std. Std. No No Std. Both std. Std. No Std. Std. Std. Std. Std. Line/screen std.	No Std. Std. No Std. Std. No Std. Both std. Std. Std. Std. Std. Std. No Std. Line/screen std.	No Std. Std. No Std. Std. No Std. Both std. Std. Std. Std. Std. Std. No Std. Line/screen std.	No Std. Std. No Std. Std. No Std. Smooth std. No Std. Std. — — No Std. Std. Std. Line/page std.
<b>KEYBOARD PARAMETERS</b> Style Character/code set Detachability Program function keys Numeric keypad	Typewriter 96 ASCII Std. 4 std. Std.	Typewriter 128 ASCII Std. 22 std. Std.	IBM 5251 124 ASCII Std. 8 std. Std.	IBM 3278 124 ASCII Std. 12 Std. Std.	Typewriter 128 ASCII Std. — —
<b>ANCILLARY DEVICES</b> Serial printer, type and speed Line printer, type and speed Composite video Port for cust.-supplied devices Other vendor-supplied devices	50-19.2K bps 50-19.2K bps No Std. —	No No No Std. —	No No No Std. —	No No No Std. —	No No Opt. Std. —
<b>TRANSMISSION PARAMETERS</b> Mode Technique Communications protocol Code Speed, bits/second Format; character, line, or block Multipoint operation (pollable/addr.) Terminal interface Integral modem Integral acoustic coupler	Half/full-duplex Asynchronous ANSI/ASCII ASCII 50-19,200 Character No RS-232-C/20mA std.	Half/full-duplex Asynchronous TTY ASCII 50-19,200 Char./block No RS-232-C	Half/full-duplex Asynchronous — ASCII 110-19,200 Block No RS-232-C, 20mA	Half/full-duplex Asynchronous — ASCII 110-19,200 Block No RS-232-C, 20mA	Half/full-duplex Asynchronous ANSI X3.64 ASCII 50-19,200 Char./block No Dual RS-232-C; RS-422, CL opt. No No
<b>PRICING AND AVAILABILITY</b> Display station, 2-year lease, \$/mo. Controller, 2-year lease, \$/mo. Display station, purchase, \$ Controller, purchase, \$ Monthly prime-shift maint., \$/mo. Date of announcement Date of first production delivery Display units installed to date Serviced by	— — — — — 6/83 — Western Union	— — 995 — — 5/83 — Esprit Systems & Western Union	— — 1,095 — — 5/83 — Esprit Systems & Western Union Emulates IBM 5251 when used with protocol converter	— — 1,150 — — 5/83 — Esprit Systems & Western Union Emulates IBM 3278 Model 2 when used with protocol converter.	— — 695 — — 5/83 — Dow Jones/factory
<b>COMMENTS</b>					

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VENDOR AND MODEL	Harris 9178	IBM 3178	IBM 3290	Lear Siegler ADM 11	Lear Siegler ADM 24E
<b>TERMINAL DESCRIPTION</b>					
Stand-alone or cluster	Cluster	Cluster	Cluster	Stand-alone	Stand-alone
Maximum displays/controller	32	32	32	—	—
Transportability	No	No	No	No	No
IBM compatibility	3178/3278	3270 System	3270 System	No	No
Teletype compatibility	No	No	No	Std.	Std.
Other compatibility	—	IBM 3278 Model 2	—	—	LSI ADM 24
<b>DISPLAY PARAMETERS</b>					
Display capacity, no. of chars.	1920	1920	5300, 9920	1920	1920
Memory capacity, no. char./lines/pages	—	—	—	—	48 lines std; 96 opt.
Screen arrangement, lines x chars./line	24 x 80 plus status line	24 x 80	50 x 106, 62 x 160	24 x 80 plus status line	24 x 80 plus status line
Screen area, diagonal, inches	12	12	10.7 x 13.4	12	12
Tilt/swivel screen	No	Std.	Tilt std.	Std.	Std.
Total displayable symbols	128	94	64; 96; 120 APL	128 ASCII	128 ASCII
Symbol formation	9 x 14 dot matrix	7 x 14 dot matrix	5x8/7x9 dot matrix	7x9/7x10 dot matrix	7 x 11 dot matrix
Character phosphor	P39/P42, green, PC166 amber	Green	Amber gas plasma	P31 green; white, amber opt.	P31 green
Color capability	No	No	No	No	No
Programmable field/char. highlighting via:					
Underline	No	Std.	Std.	No	Std.
Blink	No	Std.	Std.	Std.	Std.
Blank	Std.	Std.	Std.	Std.	Std.
Bold	Std.	Std.	Std.	Reduced std.	Reduced std.
Reverse	No	Std.	Std.	Std.	Std.
Double size	No	No	No	No	Double wide std.
Scroll	No	No	Std.	Std.	Up/smooth std.
Paging	No	No	No	No	1 std.; 2 opt.
Selectable cursor blinking	Std.	Std.	Std.	Std.	Std.
Addressable/readable cursor	Std.	Addressable only	Addressable only	Both std.	Both std.
Protected format	Std.	Std.	Std.	No	Std.
Partial screen transmit	Std.	Std.	Std.	No	Std.
Split screen/windows	No	—	Up to 16 partitions	No	2 std.
Tabulation	Std.	Std.	Std.	No	Fwd./back std.
Character insert/delete	Std.	Std.	Std.	No	Std.
Line insert/delete	Std.	No	No	No	Std.
Erase	Char./line/screen	Char./line/screen std.	Char./line/screen std.	Line/page/screen std.	Line/screen std.
<b>KEYBOARD PARAMETERS</b>					
Style	Typewriter, data entry, keypunch	Typewriter, data entry, keypunch	Typewriter, APL	Typewriter	Typewriter, Teletype
Character/code set	ASCII/EBCDIC	ASCII/EBCDIC	ASCII/EBCDIC	128 ASCII	128 ASCII
Detachability	Std.	Std.	Std.	Std.	Std.
Program function keys	Up to 24	10/12 std.	24 std.	4 std.	16 Std.
Numeric keypad	Opt.	Std.	Std.	Std.	Std.
<b>ANCILLARY DEVICES</b>					
Serial printer, type and speed	Impact, 80-180 cps	Std.	Std.	Dot matrix, 180 cps	Dot matrix, 180 cps
Line printer, type and speed	Band, 300 lpm	No	No	No	No
Composite video	No	No	No	No	No
Port for cust.-supplied devices	Std.	Std.	Std.	Std.	Std.
Other vendor-supplied devices	Light pen, magnetic stripe reader	Audible alarm, security keylock	Audible alarm, security keylock	Graphics	Graphics
<b>TRANSMISSION PARAMETERS</b>					
Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Synchronous	Synchronous	Synchronous	Asynchronous	Asynchronous
Communications protocol	BSC/SDLC	BSC/SDLC	BSC/SDLC	—	—
Code	ASCII/EBCDIC	ASCII/EBCDIC	ASCII/EBCDIC	ASCII	ASCII
Speed, bits/second	Up to 9600	1200-9600	1200-9600	300-19,200	75-19,200
Format; character, line, or block	Char./block	Block only	Block only	Character	Char./line/block
Multipoint operation (pollable/addr.)	Std.	Std.	Std.	No	No
Terminal interface	RS-232-C	RS-232-C	RS-232-C	RS-232-C; 20mA opt.	RS-232-C; 20mA opt.
Integral modem	No	No	No	No	No
Integral acoustic coupler	No	No	No	No	No
<b>PRICING AND AVAILABILITY</b>					
Display station, 2-year lease, \$/mo.	Contact vendor	Purchase only	315 (rental)	—	—
Controller, 2-year lease, \$/mo.	—	—	—	—	—
Display station, purchase, \$	1,462-1,524	1,660-1,720	7,100	695	1,250
Controller, purchase, \$	—	—	—	—	—
Monthly prime-shift maint., \$/mo.	Contact vendor	75-252/yr.	30	—	—
Date of announcement	5/83	3/83	3/83	5/83	5/83
Date of first production delivery	—	—	—	6/83	—
Display units installed to date	—	—	—	—	—
Serviced by	Harris	IBM	IBM	Lear Siegler	Lear Siegler
<b>COMMENTS</b>	For use with Harris 9200 Information Processing System				

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VENDOR AND MODEL	Nabu 3503	Nabu 4604	Nabu 5000	Peripheral Technology Scat X	Protocol Computers PCI 51
<b>TERMINAL DESCRIPTION</b> Stand-alone or cluster Maximum displays/controller Transportability IBM compatibility Teletype compatibility Other compatibility	Stand-alone — No No Std. Lear Siegler ADM 3A	Stand-alone — No No Std. Lear Siegler ADM 3A, Nabu 4404	Stand-alone — No No Std. See Comments	Either 5 No 3270 No —	Stand-alone — No 5251 Std. —
<b>DISPLAY PARAMETERS</b> Display capacity, no. of chars. Memory capacity, no. char./lines/pages Screen arrangement, lines x chars./line  Screen area, diagonal, inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor  Color capability Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase	1920 — 24 x 80  12 No 128 ASCII 7 x 9 dot matrix Green  No No No No Std. No Std. No Std. No Non-selectable Addressable only No No No Std. No No Line/screen std.	1920 — 24 x 80  12 No 128 ASCII 7 x 9 dot matrix P31 green; amber opt. No No No Dim std. Std. No Up std. No Std. Addressable only No No No No No No Line/screen std.	1920 1 page 24 x 80 plus status line — 128 ASCII + 31 graph — — — Std. Std. Dim std. Std. No Smooth std. 1 std. Std. Std. Std. Std. Std. Std. Std. — — Line/screen std.	1920 — 24 x 80 plus status line 14 Std. 7 x 9 dot matrix — No Std. Std. Std. Std. Std. Addressable Std. Std. Std. Std. Std. No No Char./line/screen std.	1920 — 24 x 80 plus status line 12 Std. 124 ASCII 7 x 10 dot matrix P146 green  No Std. Std. No Std. Std. No Std. Std. Both std. Std. Std. Std. Std. Std. No Std. Line/screen std.
<b>KEYBOARD PARAMETERS</b> Style  Character/code set Detachability Program function keys  Numeric keypad	Typewriter  128 ASCII Std. 10 std.  —	Typewriter  128 ASCII Std. 10 std.  Std.	Typewriter  128 ASCII Std. 16 std.  Std.	IBM 3278  ASCII/EBCDIC Std. 24 std.  —	IBM 5251  124 ASCII Std. 8 std.  Std.
<b>ANCILLARY DEVICES</b> Serial printer, type and speed Line printer, type and speed Composite video Port for cust.-supplied devices Other vendor-supplied devices	No No No No —	120 cps No Opt. Std. —	— No Opt. Std. —	No No No Std. —	No No No Std. —
<b>TRANSMISSION PARAMETERS</b> Mode Technique Communications protocol Code Speed, bits/second Format; character, line, or block Multipoint operation (pollable/addr.) Terminal interface  Integral modem Integral acoustic coupler	Half/full-duplex Asynchronous ASCII ASCII 110-19,200 Character No RS-232-C  No No	Half/full-duplex Asynchronous ASCII ASCII 50-19,200 Character No RS-232-C  No No	Half/full-duplex Asynchronous ASCII ASCII — Char./block — —  — —	Half/full-duplex Synchronous BSC/SDLC EBCDIC/ASCII Up to 9600 Block Std. RS-232-C  No No	Half/full-duplex Asynchronous — ASCII 110-19,200 Block No RS-232-C  No No
<b>PRICING AND AVAILABILITY</b> Display station, 2-year lease, \$/mo. Controller, 2-year lease, \$/mo. Display station, purchase, \$ Controller, purchase, \$ Monthly prime-shift maint., \$/mo. Date of announcement Date of first production delivery Display units installed to date Serviced by	— — 495 — — 5/83 — — Third party	— — 695 — — 5/83 — — Third party	— — 795 — — 5/83 — — Third party	Contact vendor — 795-2,995 — — 2/83 — — Peripheral Technology	38 — 995 — — 3/83 — — PCI
<b>COMMENTS</b>		Retrofit graphics kit (Plot 10- compatible) optional	Emulates: Nabu 4604, 4152, & 4144; Hazeltine (Esprit Systems) Esprit; ADDS Viewpoint, Re- gent 25; Lear Sieg- ler ADM 5, ADM 22; Televideo 925, 950		Emulates IBM 5251 when used with PCI 1051 protocol converter

## Alphanumeric Display Terminals Addendum

VENDOR AND MODEL	Protocol Computers PCI 78	Racal-Milgo 8278	Teleray Model 16/7801	Teletype 5410	Teletype 5420
<b>TERMINAL DESCRIPTION</b> Stand-alone or cluster Maximum displays/controller Transportability IBM compatibility Teletype compatibility Other compatibility	Stand-alone — No 3278 Std. —	Cluster 32 No 3278 No Racal-Milgo 4270 Series	Stand-alone — No No Std. Honeywell VIP 7801	Stand-alone — No No Std. ANSI X3.64 (where applicable)	Stand-alone — No No Std. ANSI X3.64 (where applicable)
<b>DISPLAY PARAMETERS</b> Display capacity, no. of chars. Memory capacity, no. char./lines/pages Screen arrangement, lines x chars./line  Screen area, diagonal, inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor  Color capability Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase	1920 — 24 x 80 plus status line 12 Std. 124 ASCII 7 x 10 dot matrix P146 green  No  Std. Std. No Std. No No No Std. No Std. Both std. Std. Std. Std. Std. No Std. No Line/screen std.	1920-3564 — 24/32/43 x 80, 27 x 132 15 Std. 128 ASCII 7x8/7x9 dot matrix Green  No  Std. Std. Std. No Std. No Both std. Std. Std. No Fwd./back std. Std. No Char./line/screen std.	1920 8 pages 24 x 80 plus status line 12; 9 & 15 opt. Opt. 128 ASCII + graphics —  —  Std. Std. Std. Dim std. Std. No Std. Std. Both std. Std. Std. Std. Fwd./back std. Std. Std. Char./line/screen/ memory std.	1920, 3168 1 page 24 x 80/132 plus 3 status 12 Tilt std. 128 ASCII, 96 graph. 5x7/7x9 dot matrix White  No  Std. Std. Std. Half-intensity Std. No Std. 1 std. Std. Addressable std. — — 2 std. Std. Std. Line/screen std.	1920, 3168 9600 char. 24 x 80/132 plus 3 status 12 Tilt std. 128 ASCII, 96 graph. 5x7/7x9 dot matrix White  No  Std. Std. Std. Half-intensity Std. No Std. Std. Std. Std. Std. Std. Std. Std. Std. Std. Std. Std.
<b>KEYBOARD PARAMETERS</b> Style  Character/code set Detachability Program function keys  Numeric keypad	IBM 3278  124 ASCII Std. 12 std.  Std.	Typewriter, data entry 128 ASCII Std. 24 std.  Std.	Typewriter  128 ASCII Std. 32/64 user- definable Std.	Typewriter  128 ASCII Std. 8 std.  Std.	Typewriter  128 ASCII Std. 16 std.  Std.
<b>ANCILLARY DEVICES</b> Serial printer, type and speed Line printer, type and speed Composite video Port for cust.-supplied devices Other vendor-supplied devices	No No No Std. —	160/200 cps matrix 200/300 lpm No No 120 cps desk- top printer	No No Opt. Std. —	— — No Std. —	— — No Std. —
<b>TRANSMISSION PARAMETERS</b> Mode Technique Communications protocol Code Speed, bits/second Format; character, line, or block Multipoint operation (pollable/addr.) Terminal interface  Integral modem Integral acoustic coupler	Half/full-duplex Asynchronous — ASCII 110-19,200 Block No RS-232-C  No No	Half/full-duplex Synchronous BSC, SNA/SDLC EBCDIC/ASCII 9600 Block Std. RS-232-C  No No	Half/full-duplex Asynchronous ANSI/ASCII ASCII 50-19,200 Char./line/block No RS-232-C std.; RS-422 opt. No No	Half/full-duplex Asynchronous ANSI/ASCII ASCII Up to 19,200 Character No RS-232-C  No No	Half/full-duplex Asynchronous ANSI/ASCII ASCII Up to 19,200 Char./block Std. RS-232-C  No No
<b>PRICING AND AVAILABILITY</b> Display station, 2-year lease, \$/mo. Controller, 2-year lease, \$/mo. Display station, purchase, \$ Controller, purchase, \$ Monthly prime-shift maint., \$/mo. Date of announcement Date of first production delivery Display units installed to date Serviced by	38 — 995 — — 3/83 — — PCI	45-51 (5-yr.) — 1,999-2,556 — — 3/83 1st quarter 1983 — Racal-Milgo	Contact vendor — 1,795-1,995 — — 5/83 — — Teleray	— — 995 — — 4/83 3rd quarter 1983 — Teletype	— — 1,495 — — 4/83 3rd quarter 1983 — Teletype
<b>COMMENTS</b>	Emulates IBM 3278 Model 2 when used with PCI 1076 pro- tocol converter				

## Alphanumeric Display Terminals Addendum

VENDOR AND MODEL	Teletype 5540	TeleVideo 915	TeleVideo 924	TeleVideo 960	Wyse WY-300
<b>TERMINAL DESCRIPTION</b> Stand-alone or cluster Maximum displays/controller Transportability IBM compatibility Teletype compatibility Other compatibility	Cluster 32 3270 No —	Stand-alone — No No Std. TeleVideo 910 Plus, ADDS Viewpoint	Stand-alone — No No Std. TeleVideo 925/ 950	Stand-alone — No No Std. DEC VT100	Stand-alone — No No Std. Wyse WY-100
<b>DISPLAY PARAMETERS</b> Display capacity, no. of chars. Memory capacity, no. char./lines/pages Screen arrangement, lines x chars./line  Screen area, diagonal, inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor  Color capability Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase	1920, 3564 — 24 x 80, 27 x 132 (13-inch only) 12; 13 Tilt std. 96 EBCDIC 9x14/7x10 dot matrix White  No No Std. Std. No No No No No No Std. Std. Both std. Std. Std. No No Std. Std. Std. Char./line/screen std.	1920 1 page; 2 opt. 24 x 80 plus status line 12 Std. 128 ASCII 6 x 7 dot matrix P31 green  No Std. Std. Std. Std. No No Std. Std. Both std. Std. No No Fwd./back std. Std. Std. Char./line/screen std.	1920 4 pages 24 x 80 plus status line 12 Std. 128 ASCII + graphics 6 x 8 dot matrix P31 green  No Std. Std. Std. Std. Both std. Std. Std. Std. Fwd./back std. Std. Std. Char./line/screen std.	1920, 2112 — 24 x 80, 16 x 132 12 Std. 128 ASCII 7 x 8 dot matrix P31 green  No Std. Std. Std. Std. Std. Up/down std. Std. Std. Both std. Std. Std. Std. Fwd./back std. Std. Std. Char./line/field std.	1920 1 page std. 24 x 80 plus 2 status 12 Std. 128 ASCII + graphics 7 x 10 dot matrix Color screen  8 colors std.  Std. Std. Std. No Std. No Std. Std. Std. Addressable only Std. Std. Std. Std. Std. Std. Line/page/field std.
<b>KEYBOARD PARAMETERS</b> Style  Character/code set Detachability Program function keys  Numeric keypad	Typewriter, data entry 96 EBCDIC Std. 24 std.  Std.	Typewriter  128 ASCII Std. 16 std.  Std.	Typewriter  128 ASCII Std. 32 std.  Std.	Typewriter  128 ASCII Std. 16 std.  Std.	Typewriter  ASCII Std. 8 std.  Std.
<b>ANCILLARY DEVICES</b> Serial printer, type and speed Line printer, type and speed Composite video Port for cust.-supplied devices Other vendor-supplied devices	30-340 cps dot mat. 220-300 lpm No Std. Light pen	No No Opt. Std. —	No No Opt. Std. —	No No Opt. Std. —	No No No Std. —
<b>TRANSMISSION PARAMETERS</b> Mode Technique Communications protocol Code Speed, bits/second Format, character, line, or block Multipoint operation (pollable/addr.) Terminal interface  Integral modem Integral acoustic coupler	Half/full-duplex Synchronous BSC, SNA/SDLC ASCII/EBCDIC Up to 9600 Block Std. RS-232-C  No No	Half/full-duplex Asynchronous — ASCII 150-19,200 Char./block No RS-232-C  Opt. No	Half/full-duplex Asynchronous — ASCII Up to 19,200 Char./block No RS-232-C  Opt. No	Half/full-duplex Asynchronous ANSI X3.64 ASCII Up to 19,200 Char./block No RS-232-C  Opt. No	Half/full-duplex Asynchronous TTY ASCII 50-19,200 Char./block No RS-232-C  No No
<b>PRICING AND AVAILABILITY</b> Display station, 2-year lease, \$/mo. Controller, 2-year lease, \$/mo. Display station, purchase, \$ Controller, purchase, \$ Monthly prime-shift maint., \$/mo. Date of announcement Date of first production delivery Display units installed to date Serviced by	Contact vendor — Contact vendor 1,633-up 4,500-11,500 — 4/83 3rd quarter 1983 — Teletype	— — 699 — — 4/83 — — GE Instr. & Comm.	— — 895 — — 4/83 — — GE Instr. & Comm.	— — — — — 4/83 — — GE Instr. & Comm.	— — — — — — — — — Wyse Technology
<b>COMMENTS</b>					





# Alphanumeric Display Terminals Addendum

The following pages provide information on 32 additional display terminal models from 24 vendors. Most of these models were introduced by the vendors after the original survey report was published. For your convenience, we have listed below the full names, addresses, and telephone numbers of all 24 vendors whose products are listed in this addendum. Please note that many of these vendors are also listed in the original report.

**Altos Computer Systems**, 2360 Bering Drive, San Jose, CA 95131. Telephone (408) 946-6700.

**International Anasazi, Inc., Emulog Division**, 2219 East University Drive, Phoenix, AZ 85034. Telephone (602) 275-0302.

**Applied Digital Data Systems, Inc. (ADDS)**, 100 Marcus Boulevard, Hauppauge, NY 11787. Telephone (516) 231-5400.

**C. Itoh Electronics, Inc.**, 5301 Beethoven Street, Los Angeles, CA 90066. Telephone (213) 306-6700.

**Datamedia Corporation**, 7401 Central Highway, Pennsauken, NJ 08109. Telephone (609) 665-5400.

**Falco Data Products, Inc.**, 1286 Lawrence Station Road, Sunnyvale, CA 94086. Telephone (408) 745-7123.

**Hazeltine Corporation**, Greenlawn, NY 11740. Telephone (516) 261-7000.

**International Business Machines Corporation (IBM)**, Information Systems Group, National Accounts Division, 1133 Westchester Avenue, White Plains, NY 10604. Telephone (914) 696-1900.

**International Business Machines Corporation (IBM)**, Information Systems Group, National Marketing Division, 4111 Northside Parkway, Atlanta, GA 30327. Telephone (404) 238-2000.

**IXO, Inc.**, 6041 Bristol Parkway, Culver City, CA 90230. Telephone (213) 417-8080.

**Lear Siegler, Inc.**, Data Products Division, 714 North Brookhurst Street, Anaheim, CA 92803. Telephone (714) 774-1010.

**Lee Data Corporation**, 10206 Crosstown Circle, Minneapolis, MN 55344. Telephone (612) 932-0300.

**Liberty Electronics USA**, 100 Clement Street, San Francisco, CA 94118. Telephone (415) 751-7560.

**Micro-Term, Inc.**, 1314 Hanley Industrial Court, St. Louis, MO 63144. Telephone (314) 968-8151.

**Northern Telecom, Inc.**, Electronic Office Systems, P.O. Box 1222, Minneapolis, MN 55440. Telephone (612) 932-8000.

**Tandy Corporation/Radio Shack**, 1800 One Tandy Center, Fort Worth, TX 76102. Telephone (817) 390-3300.

**Raytheon Data Systems Company**, 1415 Boston-Providence Turnpike, Norwood, MA 02062. Telephone (617) 762-6700.

**Tandem Computers Inc.**, 19333 Vallco Parkway, Cupertino, CA 95014. Telephone (408) 725-6000.

**TEC, Inc.**, 2727 North Fairview Avenue, Tucson, AZ 85705. Telephone (602) 792-2230.


**Telex Computer Products, Inc.**, 6422 E. 41st Street, Tulsa, OK 74135. Telephone (918) 627-1111.

**Tymshare, Inc.**, Equipment Product Marketing, 20705 Valley Green Drive, Cupertino, CA 95014. Telephone (408) 446-6000.

**Visual Technology, Inc.**, 540 Main Street, Tewksbury, MA 01876. Telephone (617) 851-5000.

**Volker-Craig Ltd., Nabu Commercial Terminals**, 330 Weber Street North, Waterloo, Ontario, Canada N2J 3Z1. Telephone (519) 884-9300.

**Zenith Data Systems**, 1000 Milwaukee Avenue, Glenview, IL 60025. Telephone (312) 391-8860.

**Zentec Corporation**, 2400 Walsh Avenue, Santa Clara, CA 95050. Telephone (408) 727-7662. 

Alphanumeric Display Terminals—Management Perspective  
and Equipment Specifications

SUPPLIER AND MODEL	Altos 1	Anasazi/ Emulog 200	ADDS Viewpoint/60	C. Itoh CIT-161	Datamedia Excel 3270-6/3270-8
<b>TERMINAL DESCRIPTION</b> Stand-alone or cluster Maximum displays/controller Transportability IBM compatibility Teletype compatibility Other compatibility	Stand-alone 1 No No Std. Altos	Stand-alone 1 No No Std. Data General D200/6053	Stand-alone — No No Std. ADDS Regent 40, 60	Stand-alone 1 No No Std. DEC VT100	Cluster 3 No 3276/3278 BSC No —
<b>DISPLAY PARAMETERS</b> Display capacity, no. of chars. Memory capacity, no. char./lines/pages Screen arrangement, lines x chars./line  Screen area, diagonal, inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor  Color capability Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase	1920 1920 char. 24 x 80 plus 2 status lines 12 Std. 128 ASCII 8 x 10 dot matrix Green  No Std. Std. Std. No Std. No Std. No Std. No Std. No Std. No Std. No Std. No Std. Line/field/ memory	1920 — 24 x 80 12 No 96 ASCII 7 x 9 dot matrix P31 green  No Std. Std. Std. No Std. No Std. No Std. No Std. No Std. No Std. No Std. Line/screen std.	1920 — 24 x 80 plus status line 12 Tilt std. 128 ASCII 7 x 8 dot matrix P4 white, P31 green No Std. Std. Std. No Std. Both std. No No Std. Std. Std. Std. Std. Std.	1920, 3168 — 24 x 80, 24 x 132 12 No 96 ASCII 7 x 9 dot matrix  8 colors std. Std. Std. Std. No Std. Std. Std. Std. Std. Both std. — — Std. Std. Std. No Std.	1920 — 24 x 80 14 std.; 12 opt. Tilt std. 96 EBCDIC 7 x 9 dot matrix P4 white std.; P31 green opt. No No No Std. No No Std. Both std. Std. No No Std. Std. Std. Std. Screen std.
<b>KEYBOARD PARAMETERS</b> Style  Character/code set Detachability Program function keys  Numeric keypad	Typewriter  128 ASCII Std. 8 std.  Std.	Typewriter  ASCII Std. 20 std.  Std.	Typewriter  128 ASCII Std. 8 std.  Std.	Typewriter  96 ASCII Std. 4 std.  Std.	Typewriter  96 EBCDIC Std. 24 std.  Std.
<b>ANCILLARY DEVICES</b> Serial printer, type and speed Line printer, type and speed Composite video Port for cust.-supplied devices Other vendor-supplied devices	No No No — —	No No No — —	No No No Std. —	9600 bps 9600 bps — Std. —	No No No Std. —
<b>TRANSMISSION PARAMETERS</b> Mode Technique Communications protocol Code Speed, bits/sec. Format, char., line, or block Multipoint operation (pollable/addr.) Terminal interface  Integral modem Integral acoustic coupler	Half/full-duplex Asynchronous ASCII ASCII 50-9600 Char./block — RS-232-C  No No	Half/full-duplex Asynchronous ASCII ASCII 50-19,200 Character — RS-232-C, 20mA  No No	Half/full-duplex Asynchronous ASCII ASCII 110-19,200 Char./block No RS-232-C, 20mA, RS-422  No No	Half/full-duplex Asynchronous ANSI/ASCII ASCII 50-19,200 Character No RS-232-C, 20mA  No No	Half-duplex Synchronous BSC EBCDIC 1200-9600 Block Std. RS-232-C  Opt. No
<b>PRICING AND AVAILABILITY</b> Display station, 2-year lease, \$/mo. Controller, 2-year lease, \$/mo. Display station, purchase, \$ Controller, purchase, \$ Monthly prime-shift maintenance, \$/mo. Date of announcement Date of first production delivery Display units installed to date Serviced by	— — 995 — — 2/82 3/82 — Altos	— — 1,250 — — 8/81 9/81 — Anasazi	— — 895 — — 4/82 — — ADDS	— — 2,695 — — 6/82 — — Western Union	— — 1,995 2,895 — 6/82 — — RCA Service Co.
<b>COMMENTS</b>					

Alphanumeric Display Terminals—Management Perspective  
and Equipment Specifications

SUPPLIER AND MODEL	Falco Data Products TS-ISP	Falco Data Products TS-100SP	Hazeltine Esprit II	Hazeltine Executive 10	IBM 3104
<b>TERMINAL DESCRIPTION</b> Stand-alone or cluster Maximum displays/controller Transportability IBM compatibility Teletype compatibility Other compatibility	Stand-alone 1 No No Std. —	Stand-alone 1 No No Std. DEC VT100/VT52	Stand-alone 1 No No Std. —	Stand-alone 1 No No Std. —	Either — No 8775, 3276, 3278 No —
<b>DISPLAY PARAMETERS</b> Display capacity, no. of chars. Memory capacity, no. char./lines/pages Screen arrangement, lines x chars./line  Screen area, diagonal, inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor  Color capability Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase	1920 16K 24 x 80  12 No 128 ASCII 6 x 10 dot matrix P31 green std.; P4 wht./PC134 amb. No Std. Std. Std. Std. Std. Std. Std. Std. Std. Std. Std. Both std. Std. Std. Std. Fwd./back std. Std. Std. Line/page std.	1920 16K 24 x 80  12 No 128 ASCII 6 x 10 dot matrix P31 green std.; P4 wht./PC134 amb. No Std. Std. Std. Std. Std. Std. Std. Std. Both std. Std. Std. Std. Fwd./back std. Std. Std. Line/page std.	1920 — 24 x 80  12 Tilt std. 128 ASCII 7 x 11 dot matrix Green No No Std. No No Both std. Std. No No Std. No Std. Line/screen std.	1920 1 page 24 x 80 plus status line 12 Std. 124 ASCII 7 x 10 dot matrix Green No No Std. Std. 1 page std. Std. Both std. Std. Std. Std. Std. Std. Std. Std. Std. Std. Std.	1920 — 24 x 80 plus status line 12 Std. 94 7 x 14 dot matrix White No Std. Std. Std. Std. No Std. Std. Both std. Std. Std. Std. Std. Std. Std. Std. Std. Char./field/screen std.
<b>KEYBOARD PARAMETERS</b> Style  Character/code set Detachability Program function keys  Numeric keypad	Typewriter  128 ASCII Std. —  Std.	Typewriter  128 ASCII Std. 7 std.; 14 func.  Std.	Typewriter  128 ASCII Std. No  Std.	Typewriter  124 ASCII Std. 8 std.  Std.	Typewriter, data entry EBCDIC Std. 10 (Model B1); 24 (Model B2) Std.
<b>ANCILLARY DEVICES</b> Serial printer, type and speed Line printer, type and speed Composite video Port for cust.-supplied devices Other vendor-supplied devices	No No Opt. Std. —	No No Opt. Std. —	No No No Std. —	No No No Opt. —	Std. Std. No Std. Audible alarm, key- lock, clock
<b>TRANSMISSION PARAMETERS</b> Mode Technique Communications protocol Code Speed, bits/sec. Format, char., line, or block Multipoint operation (pollable/addr.) Terminal interface  Integral modem Integral acoustic coupler	Half/full-duplex Asynchronous ASCII ASCII 50-19,200 Char./block Opt. RS-232-C std.; 20mA, RS-422 opt.	Half/full-duplex Asynchronous ASCII ASCII 50-19,200 Char./block Opt. RS-232-C std.; 20mA, RS-422 opt.	Half/full-duplex Asynchronous TTY ASCII 50-19,200 Char./block No RS-232-C	Half/full-duplex Asynchronous — ASCII 110-19,200 Char./block No RS-232-C, 20mA	Half/full-duplex Synchronous BSC/SDLC EBCDIC Up to 38,400 Block Std. RS-232-C  No No
<b>PRICING AND AVAILABILITY</b> Display station, 2-year lease, \$/mo. Controller, 2-year lease, \$/mo. Display station, purchase, \$ Controller, purchase, \$ Monthly prime-shift maintenance, \$/mo. Date of announcement Date of first production delivery Display units installed to date Serviced by	— — 1,495 — — 6/82 — — Dow Jones/factory	— — 1,850 — — 6/82 — — Dow Jones/factory	— — 645 — — 6/82 — — Hazeltine & Western Union	— — 1,195 — — 6/82 — — Hazeltine & Western Union	— — 2,190-2,250 — 95-100/yr. 3/82 — — IBM
<b>COMMENTS</b>					Model B1 equipped with 75-key data entry keyboard, Model B2 equipped with 87-key typewriter keyboard

## Alphanumeric Display Terminals—Management Perspective and Equipment Specifications

SUPPLIER AND MODEL	IBM 5291	IBM 5292	IXO Telecomputing System	Lear Siegler ADM 22	Lee Data 310/320
<b>TERMINAL DESCRIPTION</b> Stand-alone or cluster Maximum displays/controller Transportability IBM compatibility Teletype compatibility Other compatibility	Either Up to 9 No 5251-11 No —	Either Up to 9 No 5251-11 No —	Stand-alone — Std. No Std. —	Stand-alone 1 No No Std. ADDS Regent 25, Hazeltine 1500	Cluster 32 No 3274/3278, 3279 No —
<b>DISPLAY PARAMETERS</b> Display capacity, no. of chars. Memory capacity, no. char./lines/pages Screen arrangement, lines x chars./line Screen area, diagonal, inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor	1920 — 24 x 80 plus status line 12 Tilt std. 96 7 x 11 dot matrix White	1920 — 24 x 80 plus status line 12 Tilt std. 96 7 x 11 dot matrix White	16 80 char. 1 x 16  1 line (LCD) No 64 ASCII 5 x 7 dot matrix LCD	1920 — 24 x 80 plus status line 12 No 128 ASCII 7 x 11 dot matrix P31 green	1920-3564 — 24 x 80, 32 x 80, 43 x 80, 27 x 132 15 Std. 128 7 x 9 dot matrix Green
<b>Color capability</b> Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase	No Std. Std. Std. Std. No Std. No Std. Std. Std. Std. Std. Std. Std. Std. Std. No Char./field/screen std.	7 colors std. Std. Std. Std. No Std. No Std. Both std. Std. Std. Std. Std. Std. Std. Std. No Char./field/screen std.	No No No No No No 2-30 cps No No No No No No No No No No No No	No Std. Std. Std. Std. No — No Both std. Std. Std. No Std. Std. Std. Line/page std.	Yes Opt. Opt. Opt. Std. Opt. No No Std. Addressable only Std. Std. Application control Fwd./back std. Std. No Std.
<b>KEYBOARD PARAMETERS</b> Style  Character/code set Detachability Program function keys  Numeric keypad <b>ANCILLARY DEVICES</b> Serial printer, type and speed Line printer, type and speed Composite video Port for cust.-supplied devices Other vendor-supplied devices	Typewriter  EBCDIC Std. 24 command functions Std.	Typewriter  EBCDIC Std. 24 command functions Std.	Typewriter  128 ASCII No No No	Typewriter  128 ASCII Std. 7 std. Std.	Typewriter, data entry, APL 96 EBCDIC Std. 24 std. Opt.
<b>TRANSMISSION PARAMETERS</b> Mode Technique Communications protocol Code Speed, bits/sec. Format, char., line, or block Multipoint operation (pollable/addr.) Terminal interface  Integral modem Integral acoustic coupler <b>PRICING AND AVAILABILITY</b> Display station, 2-year lease, \$/mo. Controller, 2-year lease, \$/mo. Display station, purchase, \$ Controller, purchase, \$ Monthly prime-shift maintenance, \$/mo. Date of announcement Date of first production delivery Display units installed to date Serviced by	Half/full-duplex Synchronous BSC/SDLC EBCDIC 1200-9600 Block Std. RS-232-C  Opt. No — 2,100 — 230/yr. 7/82 — — IBM	Half/full-duplex Synchronous BSC/SDLC EBCDIC 1200-9600 Block Std. RS-232-C  Opt. No — 4,950 — 420/yr. 7/82 — — IBM	Full-duplex Asynchronous  ASCII 300 Character No —  Std. Opt. — 500 — — 3/82 — — IXO	Half/full-duplex Asynchronous  ASCII 75-19,200 Char./block No RS-232-C, 20mA  No No — 695 — — 6/82 — — Lear Siegler	Half/full-duplex Synchronous BSC/SDLC EBCDIC 2400-19,200 Block Std. RS-232-C  No No — — — — — — — Contact vendor Contact vendor Contact vendor Contact vendor Contact vendor 8/79 9/79 — Lee Data
<b>COMMENTS</b>		Displays up to seven colors	Hand-held system for one-button access to public and private databases		Model 310 is the remote version; model 320 is local version; screen has status line

## Alphanumeric Display Terminals—Management Perspective and Equipment Specifications

SUPPLIER AND MODEL	Lee Data 410/420	Liberty Electronics Freedom 100	Micro-Term Ergo 2000	Micro-Term Ergo 3001	Micro-Term Mime 340
<b>TERMINAL DESCRIPTION</b> Stand-alone or cluster Maximum displays/controller Transportability IBM compatibility Teletype compatibility Other compatibility	Cluster 32 No 3274/3278 No DEC VT100, VT52	Stand-alone 1 No No Std. —	Stand-alone — No No Std. DEC VT52, Haz. 1500, LSI ADM 3A	Stand-alone — No No Std. DEC VT100	Stand-alone — No No Std. Haz. 1500, LSI ADM 3A, DEC VT52
<b>DISPLAY PARAMETERS</b> Display capacity, no. of chars. Memory capacity, no. char./lines/pages Screen arrangement, lines x chars./line  Screen area, diagonal, inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor  Color capability Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase	1920-3564 — 24 x 80, 32 x 80, 43 x 80, 27 x 132 15 Std. 128 7 x 9 dot matrix Green	2000 2000 char. 25 x 80  12 Tilt std. 128 ASCII 7 x 9 dot matrix Green	1920 — 24 x 80  12 Tilt std. 128 5 x 7 dot matrix P31 green	1920, 3168 2 pages (80-col.) 24 x 80, 24 x 132 plus status line 12 Tilt std. 128 7 x 9 dot matrix P31 green	1920 — 24 x 80  12 No 128 7 x 9 dot matrix Green
<b>KEYBOARD PARAMETERS</b> Style  Character/code set Detachability Program function keys  Numeric keypad	Typewriter  96 EBCDIC Std. 24 std.  Std.	Typewriter  128 ASCII Std. 10 std.  Std.	Typewriter  128 ASCII Std. No  Std.	Typewriter  128 ASCII Std. 4 std.  Std.	Typewriter  128 ASCII No 13 std.  Std.
<b>ANCILLARY DEVICES</b> Serial printer, type and speed Line printer, type and speed Composite video Port for cust.-supplied devices Other vendor-supplied devices	Matrix, 180/340 cps No No No Opt. Bar code reader, mag. stripe reader, light pen	No No No Std. —	No No No Std. —	No No No Std. —	No No No Std. —
<b>TRANSMISSION PARAMETERS</b> Mode Technique Communications protocol Code Speed, bits/sec. Format; char., line, or block Multipoint operation (pollable/addr.) Terminal interface  Integral modem Integral acoustic coupler	Half/full-duplex Sync./Async. BSC/SDLC EBCDIC/ASCII See comments Char. (async.)/block Std. RS-232-C  No No	Half/full-duplex Asynchronous ASCII ASCII 110-19,200 Char./block No RS-232-C; 20mA  No No	Half/full-duplex Asynchronous ASCII ASCII 300-19,200 Char./block No RS-232-C std. 20mA opt.  No No	Half/full-duplex Asynchronous ASCII ASCII 50-19,200 Char./block No RS-232-C, 20mA  No No	Half/full-duplex Asynchronous ASCII/ANSI ASCII 110-19,200 Block No RS-232-C  No No
<b>PRICING AND AVAILABILITY</b> Display station, 2-year lease, \$/mo. Controller, 2-year lease, \$/mo. Display station, purchase, \$ Controller, purchase, \$ Monthly prime-shift maintenance, \$/mo. Date of announcement Date of first production delivery Display units installed to date Serviced by	Contact vendor Contact vendor Contact vendor Contact vendor Contact vendor 4/82 4/82 — Lee Data	— — 595 — — 6/82 — Liberty Electronics	— — 1,195 — 18-22 — — Western Union	— — 1,495 — 18-22 6/82 — Western Union	— — 750-995 — 18-22 — — Western Union
<b>COMMENTS</b>	Model 410 is the remote version; Model 420 is local version; up to 16 async. ports; line speeds; sync—2400 to 19,200; async— 300-9600				

## Alphanumeric Display Terminals—Management Perspective and Equipment Specifications

SUPPLIER AND MODEL	Micro-Term Mime 740	Northern Telecom Displayphone	Radio Shack DT-1	Raytheon R2079
<b>TERMINAL DESCRIPTION</b> Stand-alone or cluster Maximum displays/controller Transportability IBM compatibility Teletype compatibility Other compatibility	Stand-alone — No No Std. DEC VT100, VT52	Stand-alone — Std. (13½ lbs.) No Std. —	Stand-alone 1 No No Std. ADDS, Hazeltine, LSI, Televideo	Cluster 8/32 No 3279 No —
<b>DISPLAY PARAMETERS</b> Display capacity, no. of chars. Memory capacity, no. char./lines/pages Screen arrangement, lines x chars./line  Screen area, diagonal, inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor  Color capability Programmable field/char. highlighting via: Underline Blink Blank Bold Reverse Double size Scroll Paging Selectable cursor blinking Addressable/readable cursor Protected format Partial screen transmit Split screen/windows Tabulation Character insert/delete Line insert/delete Erase	1920, 3168 2 pages (80 col.) 24 x 80, 24 x 132  12 No 128 7 x 9 dot matrix Green  No Std. Std. No No Std. Std. Std. Std. Std. Std. Std. Both std. No No Std. Std. Std. Std. Std. Std. Std. Line/field/screen std.	960, 1920 2 pages 24 x 40, 24 x 80, plus 25th line 7 No 96 ASCII, 64 ANSI 5 x 7 dot matrix White  No Std. Std. Std. Std. No No Std. Std. No No No Std. No No No — —	1920 — 24 x 80  12 No — — White  No Std. Std. Std. Std. No No No No Std. Std. No No Std. No No — —	960, 1920, 2560 — 12 x 80, 24 x 80, 32 x 80 15 Opt. 128 ASCII 7 x 9 dot matrix —  2/4 colors  No No Std. Std. No No No No Std. Both std. Std. Std. No Std. No Fwd./back std. Std. No Char./line/screen std.
<b>KEYBOARD PARAMETERS</b> Style  Character/code set Detachability Program function keys  Numeric keypad	Typewriter  128 ASCII No 4 std., plus 4 add. functions Std.	Typewriter  128 ASCII Retractable No  No	Typewriter  ASCII No No  Std.	Typewriter, data entry  ASCII/EBCDIC std. Std. 24 std.  Opt.
<b>ANCILLARY DEVICES</b> Serial printer, type and speed Line printer, type and speed Composite video Port for cust.-supplied devices Other vendor-supplied devices	No No No Std. —	120 cps No No Std. —	No No No — —	Impact, 180 cps No No Std. Light pen
<b>TRANSMISSION PARAMETERS</b> Mode Technique Communications protocol Code Speed, bits/sec. Format, char., line, or block Multipoint operation (pollable/addr.) Terminal interface  Integral modem Integral acoustic coupler	Full-duplex Asynchronous ASCII/ANSI ASCII 75-19,200 Character No RS-232-C  No No	Half/full-duplex Asynchronous ASCII ASCII 75-1200 Character No RS-232-C  — —	Half/full-duplex Asynchronous ASCII ASCII 75-19,200 Character No RS-232-C, parallel  No No	Half-duplex Synchronous BSC/SDLC ASCII/EBCDIC Up to 9600 Block Std. RS-232-C  No No
<b>PRICING AND AVAILABILITY</b> Display station, 2-year lease, \$/mo. Controller, 2-year lease, \$/mo. Display station, purchase, \$ Controller, purchase, \$ Monthly prime-shift maintenance, \$/mo. Date of announcement Date of first production delivery Display units installed to date Serviced by	— — 1,295 — 18-22 — — — Western Union	— — 1,995 — — 2/81 2/82 — Northern Telecom	— — 699 — — 1/82 4/82 — Radio Shack	99 — 3,035 — 21 — — — Raytheon
<b>COMMENTS</b>		Telephone and display in same unit; includes built-in modem; stores up to 81 telephone numbers, also includes clock, speaker, and built-in battery back-up for memory	Available at selected Radio Shack stores and dealers	

Alphanumeric Display Terminals—Management Perspective  
and Equipment Specifications

SUPPLIER AND MODEL	Tandem 6530	TEC Series 80	Telex 476	Tymshare Scanset 410/415
<b>TERMINAL DESCRIPTION</b> Stand-alone or cluster Maximum displays/controller Transportability IBM compatibility Teletype compatibility Other compatibility	Stand-alone 1 No No Std. Tandem	Stand-alone 1 No No Std. —	Either Up to 16 No 3270 No —	Stand-alone 1 No No Std. —
<b>DISPLAY PARAMETERS</b> Display capacity, no. of chars. Memory capacity, no. char./lines/pages Screen arrangement, lines x chars./line	2000 Up to 8 pages 25 x 80	2000 5 pages 25 x 80	1920 — 24 x 80	960, 1920 — 24 x 40, 24 x 80 plus status line
Screen area, diagonal, inches Tilt/swivel screen Total displayable symbols Symbol formation Character phosphor	15 Std. 128 ASCII 7 x 9 dot matrix P31 green	15 Std. 128 ASCII 7 x 12 dot matrix White; green opt.	15 No 96 EBCDIC 8 x 15 dot matrix White std.; green opt.	9 No 96 ASCII 5 x 9 dot matrix P4 white
Color capability Programmable field/char. highlighting via:	No	No	No	No
Underline	Std.	Std.	No	No
Blink	Std.	Std.	No	No
Blank	Std.	Std.	No	No
Bold	Std.	No	No	No
Reverse	Std.	Std.	Std.	No
Double size	No	Std.	No	No
Scroll	Std.	Up/down std.	No	No
Paging	Std.	Std.	No	No
Selectable cursor blinking	Std.	Std.	Std.	—
Addressable/readable cursor	Std.	Std.	Both std.	—
Protected format	Std.	Std.	Std.	No
Partial screen transmit	Std.	Std.	Std.	No
Split screen/windows	No	Std.	No	No
Tabulation	Std.	Std.	Std.	No
Character insert/delete	Std.	Std.	Std.	No
Line insert/delete	Std.	Std.	No	No
Erase	—	Std.	Char./screen std.	—
<b>KEYBOARD PARAMETERS</b> Style	Typewriter	Typewriter	Typewriter, data entry	Typewriter
Character/code set	ASCII	128 ASCII	EBCDIC	ASCII
Detachability	Std.	Std.	Std.	No
Program function keys	16 std.	18 std.	12/24 std.	6 std.; 24 functions
Numeric keypad	Std.	Std.	Std.	No
<b>ANCILLARY DEVICES</b> Serial printer, type and speed	Std.	No	Std.	No
Line printer, type and speed	No	No	Std.	No
Composite video	No	No	No	No
Port for cust.-supplied devices	—	Std.	Std.	Std.
Other vendor-supplied devices	—	—	—	—
<b>TRANSMISSION PARAMETERS</b> Mode	Half/full-duplex	Half/full-duplex	Half/full-duplex	Half/full-duplex
Technique	Async./sync.	Asynchronous	Synchronous	Asynchronous
Communications protocol	ASCII	ASCII	BSC/SDLC	ASCII
Code	ASCII	ASCII	EBCDIC	ASCII
Speed, bits/sec.	50-19,200	Up to 19,200	Up to 9600	75-1200
Format; char., line, or block	Char./block	Char./block	Block	Character
Multipoint operation (pollable/addr.)	Std.	No	Std.	No
Terminal interface	RS-232-C, 20mA	RS-232-C	RS-232-C	RS-232-C
Integral modem	No	No	No	415 only
Integral acoustic coupler	No	No	No	No
<b>PRICING AND AVAILABILITY</b> Display station, 2-year lease, \$/mo.	—	—	—	—
Controller, 2-year lease, \$/mo.	—	—	—	—
Display station, purchase, \$	3,200	1,875	3,700	495 (410); 649 (415)
Controller, purchase, \$	—	—	—	—
Monthly prime-shift maintenance, \$/mo.	—	—	—	—
Date of announcement	3/82	6/82	5/82	2/82
Date of first production delivery	4/82	—	8/82	—
Display units installed to date	—	—	—	—
Serviced by	Tandem	TEC	Telex	Tymshare
<b>COMMENTS</b>				Personal information terminals; features include auto dial, speaker, & graphics char.; Model 415 includes built-in modem; manufactured by Matra (France)

