General Purpose Terminals Pocket Reference Guide

WYSE

General Purpose Terminals
Pocket Reference Guide

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The Wyse Advantage

- A Wyse terminal for every need
- Standard-setting performance and compatibility
- Leading edge ergonomics
- Heavy duty keyboards – the best for user comfort
- Reliable manufacturer committed to the highest levels of product quality
- World's leading supplier of terminals – over 8 million sold since 1981
- Technical support available during normal business hours (Monday - Friday 7:00 a.m. - 7:00 p.m. Central time). Call 1-800-800-WYSE or email techsupport@wyse.com.

Wyse Monochrome General-Purpose Terminals

The WY-55 heads the list of proven high-quality terminals. The huge installed base of WY-55 worldwide ensures a large number of applications written for this product.
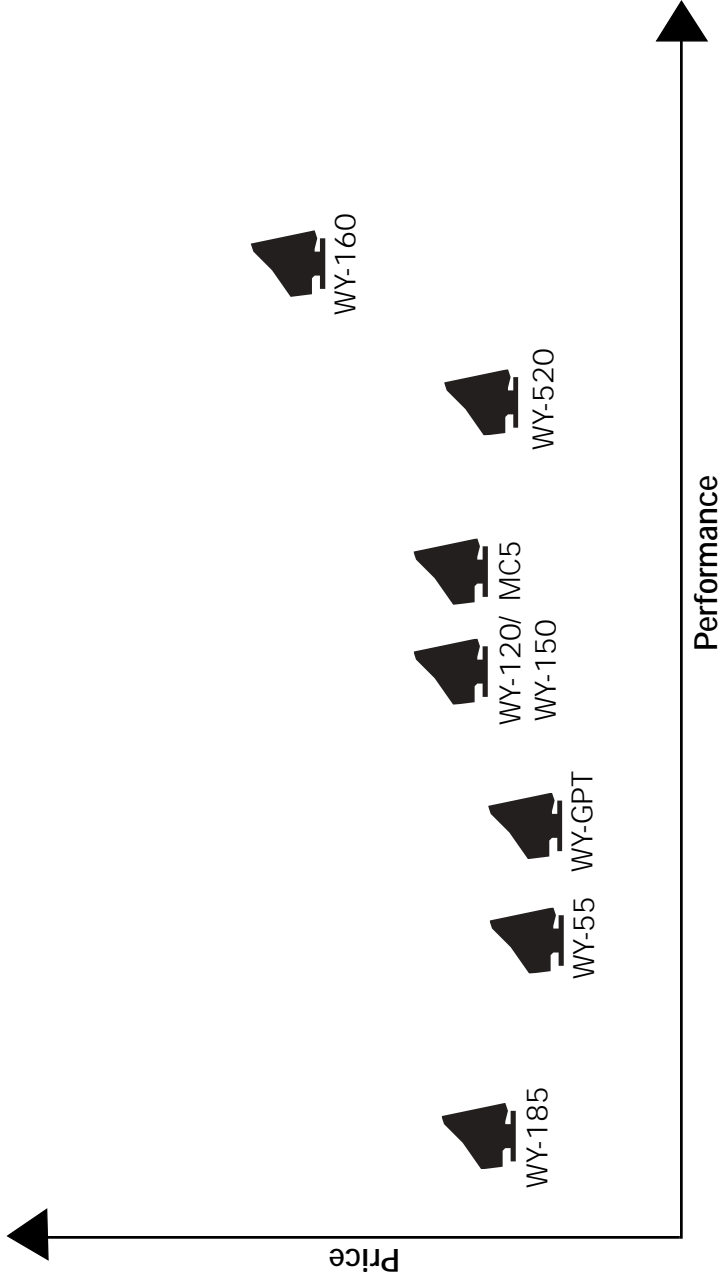
The WY-GPT offers IBM 3151 compatibility along with WY-60, DEC VT320, PCTerm, and UNIX Console compatibility.

The advanced features, world-class ergonomics, and exceptional display capabilities designed into the "100" series of products embody the Wyse commitment to offer superior products at very competitive prices.

Terminals for DEC (ANSI) Environments

The WY-185 and WY-520 DEC-compatible terminals span the range of DEC environment emulations. In addition, many Wyse general purpose terminals offer DEC-compatible emulation modes.

Terminals at a Glance

WY-185

WY-55 WY-GPT

WY-120/ MC5
WY-150

WY-520

WY-160

Price

Performance

Terminals Feature Comparison

	Monochrome General Purpose Terminals		
	WY-55	WY-GPT	WY-150
PHOSPHOR COLOR	G,A,W	G,A,W	G,A,W
COMPATIBILITY			
ASCII	Y	Y	Y
ANSI	VT220	VT420	VT220
PCTerm	Y	Y	Y
PC Graphics	N	N	N
TEK Graphics	N	N	N
DISPLAY			
Low Emissions (2)	Y	N	Y
Overscan	Y	Y	Y
Max refresh rate	80 Hz	76 Hz	78 Hz
Max char. resolution	10X16	10x16	10X16
Columns	80/132	80/132	80/132
Lines	26/44	26/44	26
Max pages of memory	7	6	7
Split screen	Y	Y	Y
Dual host/Distinct sessions	N	N	N
Concurrent sessions	N	N	N
KEYBOARD SUPPORT			
ASCII kbd	Y	Y	Y
EPC/Int'l EPC kbd	Y	Y	Y
105-key ANSI kbd	Y	Y	N
COMMUNICATIONS			
Number of ports	2	3	3
Main 1	RS-232	RS-232	RS-232
Aux1	RS-232	RS-232 DB9	RS-232 DB9
Aux2	Parallel (2)	Parallel	Parallel
Max Main KBaud	115.2	115.2	38.4
Max Aux KBaud	115.2	115.2	38.4
POSITIONING	Entry Level General Purpose ASCII/ANSI/ PCTerm UNIX Console	Entry level General Purpose ASCII/ANSI/IBM/ PCTerm UNIX Console	General Purpose ASCII/ANSI/ PCTerm

Terminals for DEC Environments			
MC5	WY-160	WY-185	WY-520
G,A,W	W	W	G,A,W
Y	Y	N	Y
VT220	VT320ID	VT320	VT420
Y	Y	N	Y (DEC)
N	Y	N	N
N	Y	N	N
N	Y	Y	Y
Y	Y	Y	Y
78 Hz	76 Hz	85 Hz	100 Hz
10x16	10X20	10X20	10X16
80x132	80/132	80/132	80/132
26/44	27/45	25	26/52
7	8	2	6
Y	Y	N	Y
Y	Y	N	Y
N	N	N	Y
Y	Y	N	N
Y	Y	N	Y
Y	Y	Y	Y
3	3	3	4
RS-232	RS-423/232	RS-232	RS-232/423
RS-232 DB9	RS-423/232 DB9	Modular 423	Modular 423
Parallel	Parallel	Modular 423	Modular 423
115.2	115.2	38.4	38.4
38.4	38.4	38.4	38.4
General Purpose ASCII/ANSI/ PCTerm UNIX Console	ASCII/ANSI/ PCTerm with Graphics	DEC VT320 compatible	DEC Multi-vendor Environment Dual Session VT420, WY-60, UNIX Console

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WY-55/WY-55ES

WHAT IS IT?

- Low-end general purpose ASCII/ANSI/PCTerm with UNIX Console
- Ideal for multiuser micro-computer environments

WHO NEEDS IT?

- Workgroups requiring UNIX reliability and effectiveness
- Small businesses/departments requiring multiuser DOS capabilities
- Vertical markets concerned with ergonomics, OEMs, or government

KEY SELLING POINTS

- The ES model meets the worldwide ergonomic safety, and emission standards
- Fast throughput
- Overscan video and high refresh rate (up to 80 Hz)
- Ergonomic design for optimum user comfort and convenience
- Flexibility with multiple emulations, keyboards, and ports

FEATURES AND BENEFITS

True WY-50 mode: Fully compatible with the WY-50 to take advantage of the broad WY-50 application base

ASCII, ANSI, and PCTerm personalities: Optimal emulation set (including VT220) to fit in virtually any environment

UNIX console mode: Makes the terminal more user-friendly in UNIX environment than ever

Up to seven pages of memory: Increases productivity in data intensive environments

512 character downloadable soft fonts: Increases ability to customize and display special characters

ASCII, ANSI, or PC style keyboards with up to 16 languages supported: Increases flexibility for a variety of users worldwide

WY-55/WY-55ES

ERGONOMICS
- Color: Paper-white (P-192), amber (P-134), green (P-31) phosphors
- Monitor: 14-inch diagonal, flat, non-glare CRT with electrostatic field reduction on the ES model
- Video: Borderless, full-screen image (selected modes)
- Refresh: 80 Hz or 70 Hz
- Adjustments: Tilt and swivel

ALPHANUMERIC FEATURES
- Personalities: ASCII: Wyse WY-50, WY-50+, WY-60, WY-150/120, WY-150+/120+, ADDS Viewpoint A2, TeleVideo TVI-925/910+/905; HZ 1500. ANSI: DEC VT220, VT100, VT52; PCTerm; UNIX Console
- Character cell: 10 x 16, 10 x 15, or 10 x 13 (80 columns); 9 x 16, 9 x 15, or 9 x 13 (132 columns)
- Formats: 26/44 lines by 80/132 columns, up to seven pages

KEYBOARD
- Layouts: Choice of 102-key Enhanced PC, 103-key Int'l Enhanced PC, 101-key Wyse ASCII, and 105-key Wyse ANSI
- Languages: ASCII keyboard: French/Canadian, Spanish, Swedish, Norwegian, Swiss/French, Swiss/German, Italian, Danish, French/Belgian, French, German, U.K. English, U.S. English

  ANSI keyboard: Czech, Danish, Dutch/Russian, Flemish, French/Belgian, French/Canadian, German, Hungarian, Italian, Norwegian, Polish, Portuguese, Romanian, SCS, Slovak, Spanish, Swedish, Swiss/French, Swiss/German, Turkish, U.K. English, U.S. English

  EPC keyboard: Polish, U.K. English, U.S. English

  IEPC keyboard: Belgian, Czech, Danish, Finnish, French, French/Canadian, German, Hungarian, Italian, Latin American Spanish, Norwegian, Polish, Romanian, Russian, SCS, Slovak, Spanish, Swedish, Swiss/French, Swiss/German, Turkish, U.K. English

COMMUNICATIONS
- Modes: Full/half duplex, block, monitor (debug)
- Main: RS-232 serial, DB-25 connector; up to 115.2 Kbaud
- Aux: RS-232 serial, DB-25 connector, up to 115.2 K baud
- Parallel: Centronics DB-25 connector*

SHIPPING WEIGHT
- Terminal and keyboard: 23 lbs (10.4 kg)

POWER
- Auto sensing from 90-264 VAC, 47-63 Hz

REGULATORY COMPLIANCE
- Ergonomics: Meets the German ZH1/618 standard, ISO 9241-3 approved
- Safety: UL 1950 and CSA 950 approved, TÜV-GS approved, EN 60950 approved, NEMKO approved
- RF Interference: FCC Class A compliant, EN 55022 Class B compliant
- CE Mark
- Meets the MPR 1990:10 guidelines on low electromagnetic and low electrostatic emissions*
- Complies with EPA Energy Star guidelines (the Energy Star emblem does not represent EPA endorsement of any product or service)

WARRANTY
- Three year limited warranty

MODEL NUMBERS
- WY-55, green: 901237-01
- WY-55, white: 901237-04
- WY-55ES, white: 901237-20
- WY-55, amber: 901237-07

* On WY-55ES model only

WY-GPT

- Flexible general purpose terminal
- Ideal for multiuser micro-processor environments

WHO NEEDS IT?

- Small businesses/departments requiring multiuser DOS capabilities
- Vertical markets concerned with ergonomics, OEMs, or government

KEY SELLING POINTS

- Very fast communications speed up to 115.2 Kbps (up to 38.4 Kbps with no handshaking)
- Host downloadable/uploadable setup parameters
- Plug and play ease of use
- 76 Hz refresh
- Interchangeable keyboard (EPC, IEPC, ASCII, ANSI, VT220)

FEATURES AND BENEFITS

ANSI, ANSI and IBM 3151 emulations: Optimal emulation set to fit virtually any environment and compatibility with many operating systems

Faster I/O performance, split screen, dual host capability: Enhance production for your users

Overscanned video screen: Reduces eyestrain

EPA Energy Star: Saves energy costs

Windows-like setup: Intuitive menus for quick and easy configuration

WY-GPT

ERGONOMICS

- Monitor: 14-inch flat screen
- Color: Green, amber, or paper-white phosphor
- Video: Fully overscanned
- Refresh Rate: 76 Hz or 60 Hz selectable
- Sessions: Dual Host with Split Screen and SSU

ALPHANUMERIC FEATURES

- Personalities: Wyse WY-60, WY-50+; DEC VT420/320/220/100/52/PCTERM; Televideo 910, 925, 950, 955; ADDS Viewpoint A2,Viewpoint 60; IBM 3151; ANSI.SYS; WordPerfect keyboard support and PCTerm
- Screen Attributes: Normal, dim, bold, blank, reverse, underscore, blink and protect attributes in all combinations
- Screen Format: 24, 25, 28, 36,42, or 48 scrollable lines plus 1 status line
- Character Cell Size: 10 x 16, 10 x 13, 10 x 12, and 10 x 9 (80 column), 9 x 16, 9 x 13, 9 x 12, and 9 x 9 (132 column)
- Character Sets: ISO 8859-1, -2 fonts, DEC and PC Multinational and PC Code Pages
- Page Formats: Single session: up to six 25 line pages (Embedded, Econo-80 mode);
- Dual Session: up to three 25 line pages
- Setup Menu: User-Friendly Host downloadable setup parameters
- Cursor Attributes: Block, under-line, blink steady, or off
- Additional: Local editing, copy and paste

KEYBOARD

- ASCII, ANSI, VT220, EPC, and IEPC; detached, adjustable, low profile with 6-foot coiled RJ11 cord with programmable function keys

COMMUNICATIONS

- COM1: RS-232/422 user select-able (up to 115.2 Kbps, and up to 38.4 Kbps with no hand-shaking)
- COM2: RS232 (up to 115.2 Kbps, and up to 38.4 Kbps with no hand-shaking)
- Parallel Port: IBM PC-Compatible

ENVIRONMENTAL

- Temperature Range Powered on: 32° to 104°F (0° to 40°C) Humidity
- 95% (maximum relative humidity non-condensing)
- Terminal and keyboard: 23 lbs. (10.4 Kgs)

POWER

- Auto-Sensing 110-240 VAC +10% 50 to 60 Hz

PHYSICAL CHARACTERISTICS

- Height: 14.93 in (335.10 mm)
- Width: 12.5 in (317.5 mm)
- Depth: 13.75 in (336.88 mm)
- Shipping Weight: 20 pounds

REGULATORY COMPLIANCE

Standard

- FCC A, CSA, UL, IEC950, ISO9241-3,TUV/GS, DHHS, and Energy Star compliant

Low Emission

- FCC A, CSA, UL, IEC950 and PTB, CISPR A, NEMKO, MPR, and CE-MARK

WARRANTY

- Three year limited warranty

MODEL NUMBERS

- WY-GPT, green - 909099-01
- WY-GPT, amber - 909099-02
- WY-GPT, white - 909099-03

WY-150/WY-150ES, WY-120/WY-120ES

WHAT IS IT?

- General Purpose ASCII/ANSI/ PCTerm
- Ideal for multiuser micro- computer environments

WHO NEEDS IT?

- Workgroups requiring UNIX reliability and effectiveness
- Small businesses/departments requiring multiuser DOS capabilities
- Vertical markets concerned with ergonomics, such as OEMs, or government

KEY SELLING POINTS

- The ES model meets worldwide ergonomic safety and emission standards
- Printed-page quality text
- Overscan video and high refresh rate
- Ergonomic design for optimum user comfort and convenience
- Flexibility with multiple emulations, keyboards, and ports

FEATURES AND BENEFITS

ASCII, ANSI, and PCTerm personalities: Optimal emulation set (including WY-50, VT220) to fit in virtually any environment

Up to seven pages of memory: Increases productivity in data inten- sive environments

512 character downloadable soft fonts: Increases ability to custom- ize and display special characters

ASCII, ANSI, or PC style keyboards with up to 15 languages sup- ported: Increases flexibility for a variety of users worldwide

Centronics parallel or serial printer port: Allows simple connection to either PC-type or serial printers

WY-150/WY-150ES, WY-120/WY-120ES

ERGONOMICS
- Color: Paper-white (P-192), amber (P-134), green (P-31) phosphors
- Monitor: 14-inch diagonal, flat, non-glare CRT with electrostatic field reduction on the ES model
- Video: Borderless, full-screen image (selected modes)
- Refresh: 78 Hz or 60 Hz
- Adjustments: Tilt and swivel base, vertical, horizontal, and tilt-screen alignments**
- Option: Height-adjustable arm

ALPHANUMERIC FEATURES
- Personalities: ASCII: WY-150/WY-120, WY-150+/WY-120+, WY-50, WY-50+, ADDS Viewpoint A2, TeleVideo TVI-925/910+; ANSI: DEC VT-220, VT100, VT52; PCTerm
- Character cell: 10 x 16 or 10 x 13 (80 columns); 9 x 16 or 9 x 13 (132 columns)
- Formats: 26 lines by 80/132 columns, up to seven pages

KEYBOARD
- Layouts: Choice of 102-key Enhanced PC, 103-key Int'l Enhanced PC, 101-key Wyse ASCII, and 105-key Wyse ANSI
- Languages: Latin American Spanish, U.S. English, (with International Enhanced PC keyboard only) and French/Canadian, with the WY-150; Danish, Dutch, Finnish, Flemish, French/Belgian, French/Canadian, German, Italian, Latin American Spanish, Spanish, Swedish, Swiss German/French, U.K. English, U.S. English, with the WY-120 (the ES models support all of the above)

COMMUNICATIONS
- Modes: Full/half duplex, block, monitor (debug)
- Main: RS-232 serial, DB-25 connector; up to 38.4 Kbaud
- Printer: Choice of ports; Centronics parallel, DB-25 connector;

RS-232 Serial, DB-9 connector, up to 38.4 Kbaud

SHIPPING WEIGHT
- Terminal and keyboard: 25 lbs (11.36 kg)

POWER
- 120 VAC ±10%, 60 Hz ±10% (WY-150/WY-150ES)
- 240 VAC ±10%, 50 Hz ±10% (WY-120/WY-120ES)

REGULATORY COMPLIANCE
- Ergonomics: Meets the German ZH1/618 standard, ISO 9241-3 approved
- Safety: UL 1950 and CSA 950 approved, TÜV-GS approved**, EN 60950 approved**
- RF Interference: FCC Class A compliant, EN 55022 Class B compliant**
- CE Mark**
- Meets the MPR 1990:10 guidelines on low electromagnetic and low electrostatic emissions*

WARRANTY
- WY-120/WY-120ES: Three year limited warranty
- WY-150/WY-150ES: One year limited warranty

MODEL NUMBERS
- WY-150 120V, green: 900983-01
- WY-120 240V, green: 900983-09
- WY-150 120V, white: 900983-04
- WY-120 240V, white: 900983-03
- WY-150ES, 120V, white: 900983-10
- WY-120ES, 240V, white: 900983-16
- WY-150 120V, amber: 900983-07
- WY-120 240V, amber: 900983-21

* On WY-120ES and WY-150ES only

** On WY-120 and WY-120ES only

MC5

WHAT IS IT?
- General purpose ASCII/ANSI/ PCTerm/SCO Console terminal
- Ideal for multiuser microprocessor environments

WHO NEEDS IT?
- Workgroups requiring UNIX reliability and effectiveness
- Small business/departments requiring multiuser DOS

KEY SELLING POINTS
- Fast display processing
- Up to 78 Hz flicker-free refresh rate with overscan
- Ergonomic design for optimum user comfort and convenience
- Flexibility with multiple emulations and keyboards

FEATURES AND BENEFITS

ANSI and PCTerm personalities: Optimal emulation set to fit virtually any environment

SCO console mode: Better compatibility with SCO UNIX applications

Up to seven pages of memory: Increases productivity in data intensive environments

Virtual terminals: Simultaneous connection to two different hosts

MC5

ERGONOMICS
- Color: Paper-white (P-192), amber (P-134), green (P-31) phosphors
- Monitor: 14-inch diagonal flat CRT
- Video: Borderless, full-screen screen image
- Refresh: 78 Hz or 60 Hz
- Adjustments: Tilt and swivel

ALPHANUMERIC FEATURES
- Personalities: WY-60, WY-50+; DEC VT220, VT100, VT52; SCO Console, PCTerm, TeleVideo TV1955, TV1950, TV925, TV910+, ADDS Viewpoint A2, Viewpoint VP60, ADM 3A, ADM 5, Link 125
- Character cell: 10x16 or 10x13 in 80 column mode
- Display Formats: 26 or 44 lines by 80 or 132 columns

KEYBOARD
- Layouts: Choice of 102 EPC, 103 key IEPC, 101 ASCII and 105 key ANSI
- Languages: ASCII keyboard: Danish, French, French/Canadian, German, Italian, Norwegian, Spanish, Swedish/Finnish, Swiss/French, Swiss/German, U.K. English, U.S. English

  EPC keyboard: U.S. English

  IEPC keyboard: Belgian, Danish, Dutch, French, French/Canadian, German, Italian, Norwegian, Spanish, Swedish/Finnish, Swiss/German, U.K. English

COMMUNICATIONS
- Modes: Full/half duplex, block, local and monitor (debug)
- Comm1: RS-232 serial, female DB-25, up to 115.2K baud
- Comm2: RS-232 serial, male DB-9, up to 38.4K baud
- Parallel: Centronics, female, DB-25

SHIPPING WEIGHT
- Terminal and keyboard: 25 lbs. (11.36 Kgs)

POWER
- Auto-sensing from 94 to 264 VAC, at 47 to 63 Hz

REGULATORY COMPLIANCE
- Ergonomics: Meets the German ZH1/618 standard, ISO 9241-3 approved
- Safety: UL 1950 and CSA 950 approved, TÜV-GS approved
- RF Interference: FCC Class A

WARRANTY
- One year limited warranty

MODEL NUMBERS
- MC5, green: 901012-01
- MC5, white: 901012-03
- MC5, amber: 901012-05

WY-160ES

WHAT IS IT?

- ASCII/ANSI/PCTerm/Graphics Terminal
- Alternative to the WY-60 and the WY-99GT

WHO NEEDS IT?

- Workgroups requiring UNIX reliability and effectiveness
- Small businesses and departments requiring multiuser DOS connectivity and DOS spreadsheet graphics
- Graphic simulation in design environments
- Sophisticated users who require concurrent access to two applications/hosts (customer service, sales, order entry…)
- Vertical markets concerned with ergonomics, such as OEMs, or government

KEY SELLING POINTS

- The ES model meets worldwide ergonomic, safety and emission standards
- Dual-host support with independently configurable sessions
- Overscan video and high refresh rate
- Multiple display formats, including high-resolution character mode
- ASCII/ANSI/PCTerm/Graphics personalities with fast throughput
- One parallel and two serial ports; highest baud rate in the industry
- Multiple keyboard support

FEATURES AND BENEFITS

Up to sixteen operating modes: The WY-160ES can fit into virtually any environment: unmatched flexibility

Multiple character resolutions: Sharp, easy-to-read characters for better compatibility with the WY-60, WY-99GT, and DEC VT220 resolutions

Dual host/distinct sessions: Allows access to two entirely different alpha personalities via the keyboard through two serial ports. Increased flexibility

115,200 baud main port rate: High-speed communications, ideal for multiuser network installations. Fastest baud rate in the industry

WY-160ES

ERGONOMICS

- Color: Paper-white (P-192) phosphor
- Monitor: 14-inch diagonal, flat, non-glare CRT with electrostatic field reduction on the ES model
- Video: borderless, full-screen image (selected modes) overscan
- Refresh: 76 Hz or 60 Hz
- Adjustments: Tilt and swivel
- Option: Height-adjustable arm

ALPHANUMERIC FEATURES

- Personalities: ASCII: WY-160, WY-50/WY-50+, ADDS Viewpoint A2, Data General D200, D210/214, D211/215, TeleVideo TVI 910+, 925, 950, 955;ANSI: DEC VT220 (VT320 ID & ISO Latin-1 character set supported), VT100, VT52; PCTerm
- Character cell: 10 x 20, 10 x 16, or 10 x 13 (80 columns); 9 x 20, 9 x 16, or 9 x 10 (132 columns)
- Formats: 27 lines or 44 lines; 80 or 132 columns, up to eight pages

GRAPHICS FEATURES

- Formats: Tektronix 4010/4014 (640 x 477)
- PC Graphic Formats: Hercules (720 x 348), CGA (640 x 400), EGA (640 x 350), VGA (640 x 480)
- Graphics Input Device: Supports Microsoft mouse

KEYBOARD

- Layouts: Choice of 102-key Enhanced PC , 103-key Int'l. Enhanced PC , 101-key Wyse ASCII and 105-key Wyse ANSI
- Languages: Latin American Spanish, U.S. English, (with International Enhanced PC keyboard only) and French/Canadian with 120V model; Danish, Dutch, Finnish, Flemish, French/Belgian, French/Cana-dian, German, Italian, Latin Amerian Spanish, Norwegian, Spanish, Swedish, Swiss German/French, U.K. English, U.S. English, with 240V model (the ES models support all of the above)

COMMUNICATIONS

- Modes: Full/half duplex, block, local, monitor (debug)
- Main (user selectable): Serial 1: RS-423 DB-25 connector up to 115.2 Kbaud, Serial 2: RS-423 DB-9 connector up to 38.4 Kbaud
- Printer: Parallel: DB-25 connector

SHIPPING WEIGHT

- Terminal and keyboard: 25 lb (11.3 Kgs)

POWER

- 90 to 264 VAC, 47-63 Hz

REGULATORY COMPLIANCE

- Ergonomics: Meets the German ZH1/618 standard, ISO 9241-3 approved
- Safety: UL 1950 and CSA 950 approved, TÜV-GS approved, EN 60950 approved, NEMKO approved
- RF Interference: FCC Class A compliant, EN 55022 Class B compliant
- CE Mark
- Meets the MPR 1990:10 guide-lines on low electromagnetic and low electrostatic emissions
- Complies with EPA Energy Star guidelines (the Energy Star emblem does not represent EPA endorsement of any product or service)

WARRANTY

- One year limited warranty

MODEL NUMBERS

- WY-160ES 120/230V, white: 900985-06

WY-185ᴇs

WHAT IS IT?
- DEC VT320 compatible terminal
- Alternative to the DEC VT320 with numerous display and functionality enhancements
- Cost-effective alternative to more expensive DEC-type terminals in the ANSI market

WHO NEEDS IT?
- Traditional DEC environments such as engineering, education, and manufacturing
- Anyone who needs or sells small-scale multiuser systems
- Workgroups requiring UNIX reliability and effectiveness
- OEMs

KEY SELLING POINTS
- Full regulatory compliance
- Exceptional display quality with overscan video and a high refresh rate
- High-resolution character mode
- Flexible connectivity

FEATURES AND BENEFITS

Standard 15 x 12 resolution: Identical to the DEC VT320 character resolution for optimum compatibility

None of these features are found on the VT320

Selectable 10 x 20 resolution: High resolution, and compatibility with VT220 soft fonts

Wyse modular or DB-25 connectors: Flexibility: Wyse modular connectors accept either DEC MMJ or standard RJ-11 connectors, RS-232 provide compatibility in VT220 and RS-232 environments

User-programmable function keys: High-speed keying for increased productivity

Ergonomics, display excellence, and high quality keyboard: Minimal operator fatigue, maximum productivity

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WY-185ES

ERGONOMICS

- Color: Paper-white (P-192) phosphor
- Monitor: 14-inch diagonal, flat, non-glare CRT electrostatic field reduction on the WY-185ES
- Video: Borderless, full screen image
- Refresh: Up to 85 Hz
- Adjustments: Tilt and swivel
- Option: Height-adjustable arm

ALPHANUMERIC FEATURES

- Personalities: DEC VT320, VT220, VT100, VT52
- Character cell: 15 x 12 or 10 x 20 (80 columns); 9 x 12 or 9 x 20 (132 columns)
- Formats: 25 lines by 80 or 132 columns with up to two pages
- Variable smooth scroll and status line
- Setup: operator selectable in English, French, or German

KEYBOARD

- Layout: 105-key ANSI keyboard
- Languages: Danish, Dutch, Finnish, Flemish, French/Belgian, French/Canadian, German, Italian, Norwegian, Spanish, Swedish, Swiss German/French, U.K. English, U.S. English

COMMUNICATIONS

- Modes: Full/half duplex, local, monitor (debug)
- Main: User definable; RS-232 DB-25 connector up to 38.4 Kbaud or Wyse modular 423 (DEC MMJ and RJ-11 compatible) up to 38.4 Kbaud
- Printer: Wyse modular 423 (DEC MMJ and RJ-11 compatible)

SHIPPING WEIGHT

- Terminal and keyboard: 25 lb (11.3 Kgs)

POWER

- 90 to 132 VAC, 180 to 270 VAC; 47-63 Hz

REGULATORY COMPLIANCE

- Ergonomics: Meets the German ZH1/618 standard, ISO 9241-3 approved
- Safety: UL 1950 and CSA 950 approved, TÜV-GS approved, EN 60950 approved, NEMKO approved
- RF Interference: FCC Class A compliant, EN 55022 Class B compliant
- Meets the MPR 1990:10 guide-lines on low electromagnetic and low electrostatic emissions
- CE Mark
- Complies with EPA Energy Star guidelines (the Energy Star emblem does not represent EPA endorsement of any product or service)

WARRANTY

- One year limited warranty

MODEL NUMBERS

- WY-185ES 120/240V, white: 900986-09

WY-520/WY-520ES

WHAT IS IT?

- Ideal for DEC multi-vendor environments
- Full featured ASCII/ANSI/ PCTerm Terminal with UNIX Console
- UNIX Console mode for system console emulation
- Dual session terminal
- 8-bit ASCII mode

WHO NEEDS IT?

- DEC system users
- Workgroups requiring UNIX reliability and effectiveness
- Small businesses/departments requiring multiuser DOS capabilities
- Vertical markets concerned with ergonomics, such as health-related organizations, OEMs, or government
- Users connecting to two sessions

KEY SELLING POINTS

- The ES model meets the most stringent ergonomic and emission standards
- Printed-page quality text
- Overscan video and high refresh rate
- Ergonomic design for optimum user comfort and convenience
- Flexibility with multiple emulations, keyboards, and ports
- Dual sessions with multiple emulations

FEATURES AND BENEFITS

ASCII, ANSI, and PCTerm personalities: Optimal emulation set (including VT420) to fit in virtually any DEC multi-vendor environment

Up to seven pages of memory: Increases productivity in data intensive environments

512 character downloadable soft fonts: Increases ability to customize and display special characters

ANSI or PC style keyboards with up to 15 languages supported: Increases flexibility for a variety of users worldwide

Serial printer port: Dedicated printer port, shared or assignable to a session.

Dual sessions: Have two sessions active at the same time to improve productivity.

WY-520/WY-520ES

ERGONOMICS

- Color: Paper-white (H25), amber (P-134), green (P-31) phosphors
- Monitor: 14-inch diagonal, flat, non-glare CRT with electrostatic field reduction on the ES model
- Video: Borderless, full-screen image (selected modes)
- Refresh: Up to 100 Hz on selected models
- Adjustments: Tilt and swivel
- Selectable Rest Timer

ALPHANUMERIC FEATURES

- Personalities: ANSI: DEC VT420, VT320, VT100, VT52, Wyse WY-85; ASCII: Wyse WY-60, PCTerm (both Wyse and DEC); UNIX Console
- Character cell: 10 x 16 or 10 x 10 or 10 x 8 (80 columns); 9 x 16 or 9 x 10 or 9 x 8 (132 columns)
- Formats: 26, 36, or 50 lines by 80/132 columns, up to seven pages
- SSU and dual host support

KEYBOARD

- Layouts: Choice of 102-key Enhanced PC, 103-key Int'l Enhanced PC, and 105-key ANSI
- Languages: Danish, Dutch, Finnish, Flemish, French/Belgian, French/Canadian, German, Italian, Latin American Spanish, Norwegian, Spanish, Swedish, Swiss German/French, U.K. English, U.S. English

COMMUNICATIONS

- Modes: Full/half duplex, block, monitor (debug)
- Main: RS-423 serial, DB-25 connector or Wyse modified MMJ; up to 38.4 Kbaud
- Second Host: RS-423 serial, Wyse modified MMJ, up to 38.4 Kbaud
- Printer: RS-423 Serial, Wyse MMJ connector, up to 38.4 Kbaud

SHIPPING WEIGHT

- Terminal and Keyboard: 25 lbs (11.36 kg)

POWER

- Auto sensing
- 120 VAC ±10%, 60 Hz ±10%
- 240VAC ±10%, 50 Hz ±10%

REGULATORY COMPLIANCE

- Ergonomics: Meets the German ZH1/618 standard; ISO 9241-3 approved
- Safety: UL 1950 and CSA 950 approved, TÜV-GS approved, EN 60950 approved, NEMKO approved
- RF Interference: FCC Class A compliant, EN 55022 Class B compliant
- CE Mark
- Meets the MPR 1990:10 guidelines on low electromagnetic and low electrostatic emissions*
- Complies with EPA Energy Star guidelines (the Energy Star emblem does not represent EPA endorsement of any product or service)

WARRANTY

- Three year limited warranty

MODEL NUMBERS

- WY-520, green: 901100-52
- WY-520, white: 901100-35
- WY-520, amber: 901100-58
- WY-520ES, white: 901100-36

* On WY-520ES only

LOW EMISSION TERMINALS "ES"

With the ES terminals from Wyse Technology, you have a clear answer to the low-emissions debate. ES terminals conform to the strict Swedish guidelines for electrostatic, VLF and ELF electromagnetic emissions (MPR 1990:10). These are some of the toughest, most stringent ELF and VLF emission limits in the world.
The ES family also meets the German, the European, and the American regulations for RFI known as the EN 55022 Class B and the FCC Class A respectfully.

WHY ALL THE FUSS ABOUT EMISSIONS?
We at Wyse Technology are concerned - not so much about emissions, but about customer satisfaction. That's why we hope to clarify current thinking on low emissions and to help you understand just what all the fuss is about.

As background, all electronic devices - from computers to TVs to electric blankets - generate electromagnetic fields, or in lay terms, "emissions." Some of these emissions are at radio frequency levels (RF), while others operate at much lower frequency ranges - very low frequency (VLF) and extremely low frequency (ELF) levels. Most countries have regulated RF emissions for years to prevent interference, or disturbances, among all kinds of electronic equipment such as radios, television sets, navigation devices and computers.

Today, VLF and ELF emissions are gaining widespread attention - at recent media debates and in new studies and governmental guidelines. Should you be concerned?

Although extensive studies have been undertaken in Europe and, more recently, in the United States, no scientifically conducted studies have determined that electromagnetic emissions from ELF or VLF are hazardous to human health. Even the Swedish MPR guidelines that limit these emissions have not been accepted as requirements in any country - not even Sweden. Those customers that are asking for low-emission terminals are doing so to be on the safe side, not to comply with any international regulations. Naturally, we applaud this caution and if our customers ask for something, we try to provide it.

Regulatory Reference Guide

Ergonomics: These requirements exist to ensure an optimal workstation that will minimize stress and enhance productivity

> **ZH1/618:** Germany - Part of the GS approval
>
> **ISO9241-3:** Europe

Safety: These requirements exist to protect users from electrical, mechanical, and fire hazards

> **UL:** United States of America
>
> **CSA:** Canada
>
> **GS:** Germany. Includes EN 60950, ZH1/618, and PTB
>
> **EN 60950**: Europe
>
> **NEMKO**: Norway

X-Radiation: These requirements exist to protect users from X-radiation

> **DHHS:** United States of America - accepted in Canada
>
> **PTB:** Germany - part of the GS approval

Radio Frequency Interference: These requirements limit interference by units with nearby electric and electronic equipment

> **FCC:** United States of America, level A for video display terminals
>
> **VDE 0871, Vfg 1046, or Vfg 243:** Germany, level A or level B
>
> **EN 55022:** Europe, required as of January 1, 1992
>
> **ZZF Telecom:** Telecommunication protocol and interference levels to equipment connected to public data networks - Germany

Visual Display Emissions: The following is not a set of requirements, but a set of guidelines that has been defined by the Swedish measurement agency SWEDAC (formerly known as MPR). The guidelines limit emissions created by a certain range of frequencies.

> **MPR 1990:10** recommends limits for electrostatic, very low and extremely low frequency magnetic and electric fields. It is a purchasing requirement desired by some organizations in Sweden and other European countries.

Power Management: Guidelines established to reduce power consumption of electrical equipment

> **Energy Star**: Environmental Protection Agency, United States of America (the Energy Star emblem does not reqresent EPA endorsement of any product or service)
>
> **NUTEK**: Power Management Standards set by the Swedish National Board for Industrial and Technical Development

CE Mark: European Community EMC Directives for Information Technology Equipment

Terminal Keyboards

The keyboards available for Wyse terminals have a unique design and styling that has pleased millions of users. Wyse keyboards use high-quality keyswitches to guarantee an optimal "feel." Wyse keyboards are also designed in accordance with German ergonomic standard ZH1/618 to ensure optimal efficiency and security. Items such as keyboard height, key spacing, and key colors have been carefully engineered for an optimal operator fit.

Wyse keyboards are available in several styles for most terminals to satisfy the widest variety of users. Although all keyboards will work with all personalities supported (when applicable), some keyboard styles are more suited than others with specific emulations. Keyboard choices also depend on user preferences and computing environment requirements. This is only a guideline:

Personalities	"Best Fit" Keyboard
ASCII	ASCII keyboard
DEC VT220, VT320, VT420 DEC VT100, VT52 WY-370	105-key ANSI
PCTerm/PCGraphics IBM 3101 1X/2X, IBM 3101	Enhanced PC, Int'l Enhanced PC

Keyboard Guide

	WY-55/WY-55ES	WY-GPT	WY-120/WY-120ES WY-150/WY-150ES	MC5	WY-160ES	WY-185ES	WY-520/WY-520ES
ASCII Style 101 keys Single P/N: 901867-01	x	x	x	x	x		
ANSI Style 105 keys (VT320) Single P/N: 901879-01	x	x	x	x	x	x	x
EPC Style 102 keys Enhanced PC, Int'l Enhanced PC Single P/N: 901865-01	x	x	x	x	x		x
IEPC Style 103 keys Enhanced PC, Int'l Enhanced PC Single P/N: 901866-02 10-pack (White) P/N: 901196-02 Single (White) P/N: 901195-02	x	x	x	x	x		x x

For language support information, please consult your local Wyse Authorized Reseller.

Glossary of Common Terms

ANSI code: stands for American National Standards Institute. Type of computer code used to communicate with terminals and printers. Used primarily in the DEC marketplace and in UNIX/ XENIX applications.

ASCII code: stands for American Standard, Committee for Information Interchange Code. Type of computer code used to communicate with terminals and printers.

Distinct sessions: the sessions are independent (they each operate with their own set of parameters) and are not updated simultaneously. The two sessions can be shown together (in windows or with a split screen), like the ADDS 4000, or one on top of the other, like the WY-160ES.

Dual host: the ability of the terminal to be connected to two different hosts or two ports on the same host through two separate ports on the terminal.

Ergonomics: the science of people-machine relationships. An ergonomically designed terminal may feature well positioned controls, bases than can tilt and swivel, or clear and crisp characters (and much more).

Overscan: a technique that lets the whole terminal screen be lit up when in positive video mode (dark characters on a light background). This eliminates the dark frame surrounding the text area, and therefore helps avoid high contrasts between the display and bezel frame.

PCTerm: this mode supports display and keyboard characteristics of the original IBM PC. A multiuser PC environment can be developed by using PC terminals along with appropriate operating system software and hardware.

Personalities or emulation: standards created by some terminal manufacturer within each code, ASCII or ANSI. Some of the most popular personalities include the WY-50, the WY-60, and the DEC VT220 modes.

Refresh rate: the number of times the screen is updated, or refreshed, per second. The higher the refresh rate, the less screen flicker . . . therefore less tiring on the eyes.

Session Support Utility (SSU): a DEC protocol that defines dual session communication, from the same host or networked hosts, on the same communication line. SSU provides simultaneous update of the two sessions. SSU support can be found on the DEC VT420, VT520, and Wyse WY-520.

Synchronous/Asynchronous: methods of timing data as it is sent from one device to another. All Wyse terminals are asynchronous. Most IBM terminals are synchronous. The two methods are not compatible.

Terminal: input/output device with a video screen and a keyboard that attaches to the host computer via an interface cable.

UNIX console: this mode, also referred to as SCO console, is the system console mode used in SCO UNIX environments.

WYSE

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