# TEK 4205

A multi-purpose, low cost, high performance color graphics terminal. Featuring VT100° compatible alphanumerics and versatile graphics input and output device capabilities.

# INTELLIGENT COLOR GRAPHICS TERMINAL

- 16 Graphic Colors
- True Zoom and Pan
- **Mouse Option**
- Local Graphics Segments
- Background Graphics Copy Support
- User Definable Dialog Characters
- IBM 3270 Coax Interface Option

The Tektronix 4205 Intelligent Color **Graphics Terminal** offers a greater price/performance ratio than any previous Tektronix desktop terminal. It establishes a new standard for high performance, low cost graphics. The Tek 4205 can display graphics in 16 colors from a total palette of 64 different colors, resulting in more readily comprehensible drawings or graphs. It provides 480 × 360 lines of pixel resolution in a  $4 \times 3$  aspect ratio that is optimized for graphics. Individual pixel spacing is the same in both vertical and horizontal directions for distortion-free images. The 13-inch high contrast, antiglare CRT delivers vivid colors and outstanding brightness. A .31mm dot pitch and 60 Hz non-interlaced refresh rate provides sharp alphanumerics and crisp, clean displays.

**Zoom and pan.** True local zoom and pan provides additional performance. As users zoom in on a portion of an image, the new image is displayed in the full detail of the 4205's 4096 × 4096 addressability (terminal space). In this way, finely detailed images are available from a medium resolution display at a most affordable cost.

Resident terminal graphics. Major new benefits of the Tek 4205 include expanded memory and segment support. With 128K of system RAM (additional 1MB optional) and graphics intelligence resident in the terminal, the interaction and response of applications are improved as host communication time is reduced.



Host-defined picture segments may be stored locally in RAM for display, manipulation and editing.

Multiple views and surfaces. The Tek 4205 also supports multiple views. Up to 64 separate views may be user defined and displayed in independent viewports. This permits viewing different portions of an image simultaneously or displaying different images concurrently for comparison purposes.

Surface support is additionally implemented in the 4205 for more efficient graphics creation and editing without unnecessary information cluttering the screen. Users can draw on surfaces independent of each other, make surfaces visible or invisible, or overlay two or more surfaces for a composite image. Surfaces and views may be combined to create the multi-level images common in printed circuit board designs and other technical information.

Precise graphic input. The 4205's detachable keyboard features a two-speed joydisk that allows users to select and move graphics objects about the screen. A three button mouse which plugs directly into the keyboard is optionally available for additional functionality. Interactive input features have expanded to include inking, rubberbanding and segment picking.

Industry standard application software. The Tek 4205 will run programs developed for the Tek 4105A. It is compatible with programs written for Tek 4010, 4100/A and 4200 Series terminals. The 4207 is upward compatible with programs written for the Tek 4120 Series.



Applications available include such programs as Tek's own industry standard PLOT 10° series as well as advanced graphics applications from other leading solution vendors including SAS Institute, ISSCO, Precision Visuals, SDRC, PDA, MCS and more.

Functional color alphanumerics.

With up to 8 simultaneous colors available from the 64 color palette in the user defined dialog area, it's easy to discriminate between information on screen. This increases interactivity and productivity. Because text may be placed on a separate dialog layer independent from the graphics area, communication with the host is accomplished without disturbing the underlying images. In addition to selecting text color, users may also download custom defined fonts for special purpose characters.

Multiple host compatibility. The Tek 4205 also supports industry standard ANSI ×3.64 and VT100° alphanumerics for compatibility with DECbased host environments. A CX option for the 4205 is available, providing coaxial connection to an IBM 3270 environment and allowing IBM 3179 alphanumeric emulation. Distributed function terminal support is included allowing multiple, concurrent host/terminal sessions in IBM environments.

Hardcopy output. The 4205 provides background graphics hardcopy from system RAM for improved productivity. Fresh images may be sent to the terminal while a graphics copy is underway. This is especially useful when working with complex images typical in advanced technical work.

In addition to supporting Tektronix color copiers and monochrome printers, the 4205 can output to other popular devices such as the Hewlett-Packard ThinkJet® and Epson FX-80™.

**Ergonomics** The Tek 4205 employs an advanced ergonomic design and small footprint which takes up minimal workspace. This has been accomplished by combining innovative design with VLSI technology.

The Tektronix' designed interactive color interface allows selection of a color index and quick alteration of hue, lightness and saturation through the use of function keys.

Cost of ownership. Besides its low price, the Tek 4205 also saves other valuable resources. Its ability to access existing software bases not only

preserves investments in software, but also in training. And its MTBF rating in excess of 10,000 hours assures trouble free operation for extended periods. It makes the 4205 an excellent candidate for non-traditional computing environments such as the shop floor, assembly line and even remote installations.

#### **Performance Characteristics:**

Display Size         330mm (13 in)           Viewing area         241 × 188mm (9.5 × 7 in)           Pixel Resolution Addressability (terminal space)         480 × 360           Color Palette         64           Displayable Colors Graphics Alphanumerics         16 mag (application)           Gin         Joydisk Mouse (optional)           Windowing Yes         Yes           Local Zoom & Pan Segments Yes         Yes           Surfaces         4           Views         64           Local Memory Optional Memory Optional Memory Communications Optional Independent Communications Optional Maximum baud rate         18M Coax	i ci ioi manoc onaraoteriotios.		
Pixel Resolution Addressability (terminal space)  Color Palette Displayable Colors Graphics Alphanumerics  Gin  Windowing Local Zoom & Pan Segments Surfaces Views Local Memory Optional Memory Optional Optional  Pixel Resolution A80 × 360  4096 × 4096  64  Joydisk Mouse (optional) Yes Yes Yes 64 Local Zoom & Pan 128K* 1MB RS-232-C IBM Coax  Maximum baud rate	Display Size	330mm (13 in)	
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With hadding 30.4K	with flagging	38.4K	
		4691, 4692, 4695,	
4696, 4644			
HP ThinkJet			
Epson FX-80		Epson FX-80	

# **Physical Characteristics:**

Dimensions	mm	in
Width	380.70	14.99
Height	346.20	13.63
Depth	414.80	16.33
Weight	kg	lbs
Net	19.5	43
Reliability		
MTBF	10.000 hrs.	

# **Electrical Characteristics:**

#### Line Voltage Range

87-128 (115V nominal) 174-250 (230V nominal)

48-66 Hz

#### **Power Consumption**

140W operating

# **Environmental Characteristics:**

#### **Operating Temperature**

+10-40° C (50-104 F)

#### Humidity

10-75% relative humidity, non-condensing

## Standards

RFI Standards VDE Level B FCC Class B

\*Actual available memory will be approximately 32KB less because of system requirements.

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ThinkJet is a registered trademark of Hewlett-Packard

FX-80 is a trademark of Epson Corporation IBM is a registered trademark of International Business Machines Corporation

# Ordering Information:

Standard accessories: Operator's Manual; Reference Guide; one power cord; one standard keyboard; one RS-232-C cable.

#### **Options**

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Opt. A1	Universal Euro Plug
Opt. A2	U.K. Plug
Opt. A3	Australian Plug
Opt. A4	North American Plug
Opt. A5	Swiss Plug
Opt. CA	Coax I/F, Ū.K. Keyboard
Opt. CB	Coax I/F, French Keyboard
Opt. CC	Coax I/F, Swedish Keyboard
Opt. CF	Coax I/F, Danish/Norg Keyboard
Opt. CG	Coax I/F, German Keyboad
Opt. CX	Coax I/F, U.S. Keyboard
Opt. 4A	U.K. Keyboard
Opt. 4B	French Keyboard
Opt. 4C	Swedish Keyboard
Opt. 4F	Danish/Norwegian Keyboard
Opt. 4G	German Keyboard
Opt. 4M	Mouse
Opt. 22	Additional 1 MB Memory
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# Warranty-Plus Service Options:

Opt. NØ	On-Site installation and setup
Opt. N2	On-site service plan, + 2 years
	upon warranty expiration
Opt. N3	OEM on-site service plan, + 12
	months (transferable)
Opt. N4	On-site installation and set-up,
	OEM
Opt. N8	12-month firmware update
	coverage

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#### For further information, contact:

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#### OEM prices and leasing programs (U.S. only) may be available.

Some of the products, options or services mentioned in this brochure may not be available outside the USA. Contact your local Tektronix representative for details.

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