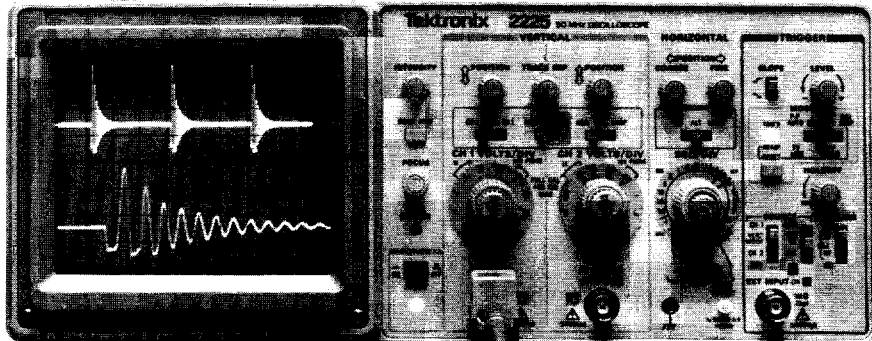


# 2225 50 MHz, ANALOG OSCILLOSCOPE

- 500  $\mu\text{V}/\text{div}$  Vertical Sensitivity
- HF/LF Reject Trigger Filters
- X5, X10, X50 Magnification
- Peak-to-Peak Auto Triggering
- Opt. Battery Power Operation



The 2225 offers simplified but precise operation for such applications as field service, design, education, and production test.

## 2225 OSCILLOSCOPE

Real economy coupled with unique real-time performance.

**CMRR** – At least 10:1 at 20 MHz.

**Input R and C** – 1 M $\Omega$ , 25 pF.

**Max Input Voltage** – 400 V (dc + peak ac). 800 V p-p.

**Channel Isolation** – 100:1 at 10 MHz.

### HORIZONTAL SYSTEM

**Sweep Speeds** – 0.5 s/div to 0.05  $\mu\text{s}/\text{div}$ . X5, X10, X50 MAG to a maximum of 5 ns/div.

**Accuracy** – X1: 3%; X5 & X10: 4%; X50: 5% (all 15°C to 35°C).

**Horizontal Operating Modes** – X1 (main only), ALT (main sweep and mag sweep), MAG, X-Y.

### TRIGGER SYSTEM

**Trigger Sensitivity** – Internal: 0.3 div at 5 MHz, 1.0 div at 50 MHz. External: 40 mV at 5 MHz, 150 mV at 50 MHz.

**Trigger Operating Modes** – Peak-Peak Auto (for TV LINE), NORM, TV FIELD, SGL SWP.

**Trigger Source** – VERT MODE, CH 1, CH 2, LINE, EXT, EXT/10.

**Trigger Coupling** – Ac, dc, HF REJ (attenuates above 30 kHz), LF REJ (attenuates below 30 kHz).

**Variable Holdoff** – At least 8:1.

### X-Y OPERATION

**Deflection Factors** – Same as vertical system.

**Bandwidth** – X-Axis: 2 MHz. Y-Axis: same as vertical.

**Phase Difference** – 3° from dc to 150 kHz.

### CRT SYSTEM

**Display** – 8 cm x 10 cm, 12.6 kV nominal voltage.

**Controls** – INTENSITY, TRACE ROTATION, BEAM FIND, FOCUS.

**Z-Axis** – 5 V causes noticeable modulation. Usable to 5 MHz.

### POWER REQUIREMENTS

**Line Voltage Range** – Low: 95 VAC to 128 VAC. High: 185 VAC to 250 VAC.

**Line Frequency** – 48 Hz to 440 Hz.

**Maximum Power Consumption** – 70 W (80 VA).

**Opt. 07** – Inverter Input Voltage: 11.8 VDC to 30 VDC (not retrofitable).

**1104A Battery Pack** – Couples to rear of scope. For use with opt. 07; Output: 12 V, 8 amps; Input: 95 VAC to 128 VAC or 185 VAC to 250 VAC (48 Hz to 440 Hz); Operating time: 3 Hrs; Charge time: Approx. 16 Hrs (longer when scope is operating); Weight: 14 lbs/6.5 kg.

**Warranty** – 3 years (Opt. 07); 1 year (1104A).

### ENVIRONMENTAL CHARACTERISTICS

See page 108.

### OTHER CHARACTERISTICS

**Safety** – UL 1244 listed, CSA certification.

**Warranty** – 3 years.

## ORDERING INFORMATION

2225 50 MHz Oscilloscope **\$1,195**

Includes:  
2 10X Voltage probes (P6103),  
Operators Manual (070-6298-00),  
3 Year Warranty, Power Cord.

### INSTRUMENT OPTIONS

Opt. 3R – Rackmount Kit **+\$250**  
Opt. 1V – Operators Tape **+\$60**  
Opt. 07 – Internal 12VDC Inverter **+\$445**  
Opt. 30 – External Battery Pack **+\$845**  
(1104A battery plus Option 07)

### ACCESSORY OPTIONS

Opt. 1C – C-9 Camera Opt. 01 **+\$610**  
Opt. 1K – K212 Instrument Cart **+\$385**  
Opt. 1T – Transit Carrying Case **+\$345**  
Opt. 02 – Pouch and Panel Cover **+\$60**  
Opt. 17 – P6408 Logic Probe **+\$375**  
Opt. 23 – Add 2 P6119 1X/10X Probes **+\$130**

### INTERNATIONAL POWER PLUG OPTIONS

Opt. A1- A5 – Available **NC**  
See page 108 for description.

### WARRANTY-PLUS SERVICE PLANS

Opt. M2 – +2 yrs service **+\$126**  
Opt. M8 – +4 annual calibrations **+\$212**

### RECOMMENDED ACCESSORIES

Service Manual – (070-6299-00) **\$95**  
Self-Study Package <sup>1</sup> –  
(068-0279-XX) **\$115**  
Battery Pack for Opt. 07 – 1104A **\$450**  
Rackmount Kit – (016-0819-03) **\$250**  
See page 108 for more accessories.

### PHYSICAL CHARACTERISTICS

Dimensions	mm	in
Width (with handle)	380	15
Height	138	5.4
Depth (without front cover)	440	17.3
Weight	kg	lb
Net	6.9	15.2

<sup>1</sup> See the Educational section, page 274 for more information.

Product available within 24 hours through Tek Direct. Call 1-800-426-2200.

## ECONOMICAL WITH HIGH-END FEATURES

The two-channel 2225 contains features usually found in more expensive instruments. For example, the new low-noise vertical system operates at 500  $\mu\text{V}/\text{div}$ . You also get horizontal alternate sweep magnifications of X5, X10 and X50. These allow you to perform most measurements typically associated with dual time base scopes.

## HANDS-FREE TRIGGERING

The 2225 provides the convenience of Tek's "hands-free" triggering, including HF and LF reject trigger filtering, TV line and field triggering. The single-sweep function is very useful for babysitting waveforms and waveform photography.

## DC OPERATION

Two 2225 options offer you the choice of battery power or external dc operation. Option 07, is an internally mounted inverter which permits the 2225 to be powered by external dc sources ranging from 11.8 VDC to 30 VDC. The second, Option 30, includes the inverter and the external, rear-mounted 1104A battery pack. This provides at least three hours of operation under battery power. The integrated charger allows operation during the charging cycle. These options are also available on the 2211 and 2214.

## CHARACTERISTICS

### VERTICAL SYSTEM (2 Identical Channels)

**Bandwidth (-3 dB) and Rise Time** – 50 MHz and 7.0 ns (5°C to 35°C); 40 MHz and 8.8 ns (0°C to 40°C).

**Deflection Factor and Accuracy** – 5 mV/div to 5 V/div,  $\pm 3\%$ . 500  $\mu\text{V}/\text{div}$ ,  $\pm 5\%$  with X10 vertical mag.

**Vertical Operating Modes** – CH 1, CH 2, CH 2 INVERT, ADD, ALT, CHOP, X10 vertical mag.

To order, call your local Tektronix Sales Office, or call Tek's National Marketing Center.  
Toll free: 1-800-426-2200, Ext. 99.