1 GHz OSCILLOSCOPE

- Displays Fast Transients and Low Repetition Rate Signals Under Normal Lighting
- 1 GHz Bandwidth (350 ps Rise Time) at 10 mV/Div
- 200 ps/Div Fastest Calibrated Sweep Rate
- 350 MHz Horizontal Bandwidth
- Ultra-High Photographic Writing Rate

ORDERING INFORMATION (PLUG-INS NOT INCLUDED)

7104 1-GHz Oscilloscope $31,550
Includes:
- Power cord (161-0096-00), $220
- Instruction Manual (070-2314-00), $270
- Operator Manual (070-2315-00), $270

INSTRUMENT OPTIONS

Opt. 02 – X-Y Horizontal Compensation +$450
Opt. 03 – EMG Capability +$200

INTERNATIONAL POWER PLUG OPTIONS


CONVERSION KIT

EMC Modification – $730
Order 040-0965-00

ACCESSORIES

Recommended Cables – DCS01. Also, see page 70.
Recommended Carts – See page 306.
Recommended Probes – See page 70.

PHYSICAL CHARACTERISTICS

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7104 1-GHz OSCILLOSCOPE

The 7104 has both the highest writing speed and highest bandwidth available in a general-purpose oscilloscope today.

The 7104’s outstanding writing speed means unsurpassed single-shot capability, with trace brightness about one thousand times that of conventional oscilloscopes. Any single-shot signal within the 1 GHz bandwidth can be seen directly on the CRT in average room light. Single-shot photography is now simple and straightforward, using standard oscillographic cameras and film.

You can capture the fastest transients without expensive high-speed film. In fact, you can see those signals on the CRT and eliminate costly time-consuming photographs.

Anomalies, such as ringing and overshoot, can only be dealt with by evaluating the signal’s analog characteristics.

With a horizontal bandwidth of 350 MHz, Option 2, X-Y Phase-Compensation will give accurate X-Y displays to 250 MHz.

CHARACTERISTICS

VERTICAL SYSTEM

Channels – Two left-most plug-in compartments. Compatible with all 7000 Series plug-ins.
Bandwidth, Rise Time and Deflection Factor – Determined by the plug-in used. See page 69.
Display Modes – Left, Alt, Add, Chop, and Right. Chopped-mode repetition rate is ~1 MHz.
Trace Separation – In dual-sweep modes, positions B trace at least four divisions above and below A trace.

HORIZONTAL SYSTEM

Channels – Two right-most plug-in compartments. Compatible with the 7B15, 7B85, and 7B92A, 7000 Series vertical amplifiers, and specialized plug-ins.
Bandwidth – Dc to 350 MHz.
Display Modes – A, Alt, Chop, B.
Chopped-mode repetition rate is ~200 kHz.
Fastest Calibrated Sweep Rate – 200 ps/Div with the 7B15.

X-Y Mode – With Option 02, X-Y Phase Compensation: Phase shift is ~2° from dc to 50 MHz. Phase balance can be obtained at any frequency up to 250 MHz. Without Option 02, X-Y Phase Compensation: Phase shift is ~2° from dc to 50 kHz.

CRT AND DISPLAY FEATURES

CRT – Internal 8 x 10-division (0.85 cm/div) graticule with variable illumination.
Photographic Writing Speed – 20 cm/ns.
Autofocus – Compensates for changes in intensity after focus control has been set.
Beam Finder – Aids in locating offscreen signal.

A pulse train with a low level pulse on the 7104, with one thousand times the brightness of conventional oscilloscopes. The researcher can view the pulse directly and take pictures with ease.

View of a single clocking pulse of 0.8 ns rise and 2 ns pulse width.