7A11

Built-in FET Probe

Dc to 250 MHz Bandwidth (7900 Family)

5 mV/div to 20 V/div

Calibrated Deflection Factors

Dc Offset

1 MΩ Input

The 7A11 is a wideband plug-in amplifier. The captive FET probe input configuration optimizes signal acquisition with high resistance (1 MΩ) and low capacitance (5.8 pF at 5 mV/div), without loss of signal amplitude by probe attenuation. Two 20X attenuators, physically mounted in the probe tip, are relay-switched into the input signal path at the appropriate deflection factor. Therefore you need not concern yourself with manual plug-on attenuators and signal dynamic range.

Deflection Factor — 5 mV/div to 20 V/div in 12 calibrated steps (1-2-5 sequence). Accuracy is within 2% of gain adjustment at 0.1 V/div. Uncalibrated VARIABLE is continuous between steps to at least 50 V/div.

Input R and C — 1 MΩ within 1%; ≈5.8 pF (5 mV/div to 50 mV/div), ≈3.4 pF (0.1 V/div to 1 V/div), ≈2 pF (2 V/div to 20 V/div).

Signal and Offset Range —

Deflection Factor Settings	5 mV/div to 50 mV/div	0.1 V/div to 1 V/div	2 V/div to 20 V/div
Offset Range	+1 V to −1 V	+20 V to −20 V	+400 V to −400 V
Offset Range to Offset Out	1:1 within 1% ±0.5 mV	20:1 within 1.5% ±0.5 mV	400:1 within 2% ±0.5 mV
Max Dc-coupled Input	200 V (dc + peak ac, ac component to 50 kHz)	200 V (dc + peak ac, ac component to 40 MHz)	200 V (dc + peak ac, ac component to 70 MHz)
Max Ac-coupled Input (Dc Component)	±200 V		

Dc Stability — Drift with time (constant ambient temperature and line voltage): short term, 0.1 div or less per minute after 20 minute warm-up. Long term, 0.3 div or less per hour after 20 minute warm up. Drift with ambient temperature (constant line voltage), 200 μV/°C or less.

Displayed Noise — 0.5 mV or 0.1 div, whichever is greater, in FULL BANDWIDTH mode, measured tangentially.

Offset Function — An internal dc source, continuously variable between +1 V and −1 V, may be used to offset the trace. (See chart for offset range.) An OFFSET OUT jack allows for monitoring of the offset voltage. OFFSET OUT source resistance is 500 Ω within 3%.

Included Accessories — Capacitor-coupler head (011-0110-00); retractable hook tip (013-0106-00); probe tip ground adapter (013-0085-00); 3 in ground lead (nose) (175-0849-00); 3 in ground lead (screw-in) (175-0848-00); 12 in ground lead (screw-in) (175-0848-02); three miniature alligator clips (344-0046-00); two insulated sleeves (166-0404-01); probe hook tip (206-0114-00); probe tip to GR 50 Ω termination (017-0088-00); 18 in cable (offset out) (175-1092-00).

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