

7A29

Dc to 1 GHz Bandwidth

10 mV/div to 1 V/div
Calibrated Deflection Factors

50 Ω Input

±500 ps Variable Delay Line (Option 04)

The 7A29 is a high-performance, wide-band, single-trace amplifier which provides a bandwidth of 1 GHz in the 7100 Series mainframes. Bandwidth constant over the entire range of calibrated deflection sensitivities of 10 mV/div to 1 V/div. Input impedance is 50 Ω. Manually resettable input protection circuitry protects the input against most common overloads. Polarity of the display is selectable by a front-panel switch. An optional variable delay line (front-panel adjustable) permits matching the transit time of two 7A29s and/or probes to better than 10 ps.

CHARACTERISTICS

Bandwidth — Dc Coupled: 1 GHz (10 mV/div to 1V/div).

Deflection Factor — Calibrated: 10 mV/div to 1 V/div in seven steps (1-2-5 sequence). Accuracy is within 2% with gain adjusted at 0.1 V/div. Uncalibrated: Variable continuously between steps and a maximum of at least 2.5 V/div (with some bandwidth reduction).

Input Z — 50 Ω.

Ac Coupling — -3 dB at 1 kHz or less from a 50 Ω source.

Option 04, Variable Signal Delay — Permits matching the transit time of two preamps and probes to better than 10 ps. Range is ±500 ps.

Maximum Input Voltage — Dc Coupled: 50 V or 10 V RMS (whichever is less). Ac Coupled: 100 V additional.

Dc Stability — Drift with Ambient Temperature (Line Voltage Constant): 0.04 div/°C or less.

Input Protection — Internal detection circuitry provides protection by automatically disconnecting excessive signals of up to 50 V. The "disconnected" condition is indicated and has manual reset.

ORDERING INFORMATION

7A29 Amplifier **\$3,245**
Includes: Instruction manual (070-2320-00).
Option 04 — Variable Signal Delay. **+\$435**

P6201 FET Probe

Dc to 900 MHz Bandwidth

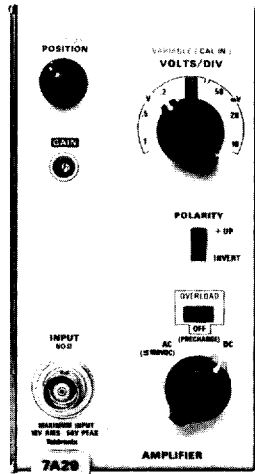
50 Ω or 1 MΩ Inputs

Very low input capacitance permits high frequency signal acquisition with minimum loading while high input resistance minimizes low frequency and dc loading. Requires probe power (either from scope or 1101A Probe Power Supply).

ORDERING INFORMATION

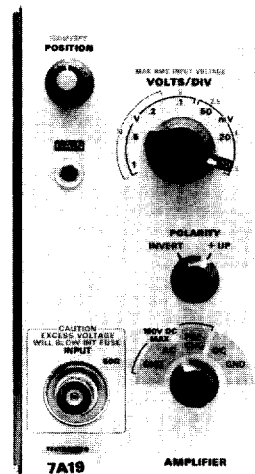
P6201 1X, FET Probe.
Order 010-6201-01 **\$1,220**

7A29



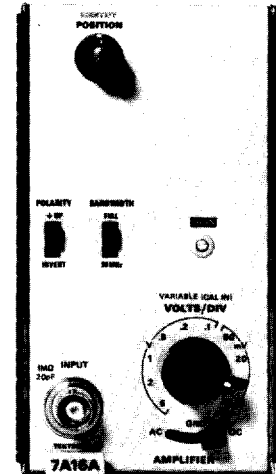
Dc to 1 GHz Amplifier

7A19



Dc to 600 MHz Amplifier

7A16A



Dc to 225 MHz Amplifier

7A19

Dc to 600 MHz Bandwidth

10 mV/div to 1 V/div
Calibrated Deflection Factors

50 Ω Input

±500 ps Variable Delay Line (Option 04)

The 7A19 is a high-performance, wide-band, single-trace amplifier which provides a bandwidth of 600 MHz in the 7100 Series mainframes. Bandwidth is constant over the entire range of calibrated deflection sensitivities of 10 mV/div to 1 V/div. Input impedance is 50 Ω. An optional variable delay line (front-panel adjustable) permits matching the transit time of two 7A19s and/or probes to better than 50 ps.

CHARACTERISTICS

Bandwidth — Dc Coupled: 600 MHz (10 mV/div to 1 V/div).

Deflection Factor — Calibrated: 10 mV/div to 1 V/div in seven steps (1-2-5 sequence). Accuracy is within 3%.

Input Z — 50 Ω.

Option 04, Variable Signal Delay — Permits matching the transit time of two preamps and probes to better than 50 ps. Range is ±500 ps.

Maximum Input Voltage — Dc Coupled: 50 V or 10 V RMS (whichever is less). Ac Coupled: 100 V additional.

Dc Stability — Drift with Ambient Temperature (Line Voltage Constant): 100 μV/°C or less.

ORDERING INFORMATION

7A19 Amplifier **\$2,825**
Includes: Instruction manual (070-2199-00).
Option 04 — Variable Signal Delay. **+\$435**

7A16A

Dc to 225 MHz Bandwidth

5 mV/div to 5 V/div
Calibrated Deflection Factors

1 MΩ Input

The 7A16A is a single-trace amplifier which provides a bandwidth of 225 MHz in the 7900 and 7100 Series mainframes. Bandwidth is constant over the entire range of deflection sensitivities of 5 mV/div to 5 V/div. Bandwidth may be limited to 20 MHz to reduce displayed noise in lower-frequency applications.

CHARACTERISTICS

Bandwidth — Dc Coupled: 5 mV/div to 5 V/div; 250 MHz. Ac Coupled: 10 Hz or less to 250 MHz.

Deflection Factor — Calibrated: 5 mV/div to 5 V/div in 10 steps (1-2-5 sequence). Accuracy is within 2% with gain adjusted at 10 mV/div. Uncalibrated: Variable continuously between steps to at least 12.5 V/div.

Input R and C — 1 MΩ within 2%; ≈20 pF.

Maximum Input Voltage — Dc Coupled: 250 V (dc + peak ac), ac component 500 V p-p maximum, 1 kHz or less. Ac Coupled: 500 V (dc + peak ac), ac component 500 V p-p maximum, 1 kHz or less.

Dc Stability — Drift with Ambient Temperature (Line Voltage Constant): 0.02 div/°C. Drift with Time (Ambient Temperature and Line Voltage Constant): 0.02 div in any one minute after one hour warm-up.

Displayed Noise — ≤0.1 div at 5 mV/div (with a 7900 Series mainframe).

ORDERING INFORMATION

7A16A Amplifier **\$1,275**
Includes: Instruction manual (070-1378-01).

For recommended probes see pages 191 and 426.
For 7000 Series vertical system specifications see page 190.