The FTA820A Amplifier is a high-performance, wide-bandwidth amplifier designed for boosting very fast linear signals from photomultipliers, electron multipliers, silicon charged-particle detectors, and other detectors used in fast timing applications. The rise time is <1 ns with a 5-V output, enabling excellent timing resolution.

The FTA820A provides eight separate and identical amplifiers in a single-width NIM module. Each FTA820A amplifier section has a gain of 200, noninverting. LEMO type 00C50 connectors are used for all signal connections.

### Specifications

**PERFORMANCE**

GAIN FOR EACH CHANNEL (10% gain tolerance) 200, noninverting.

NUMBER OF CHANNELS 8.

RISE TIME ≤1 ns.

NOISE ≤20 µV rms equivalent input noise.

BANDWIDTH 10 to 350 MHz.

PROPAGATION DELAY ≤30-ps variation between channels.

OUTPUT RANGE 0 to –5 V with 50-Ω load.

INPUTS One for each channel. LEMO connector; input impedance 50 Ω.

OUTPUTS One for each channel. LEMO connector; 0 to –5 V output with a 50-Ω load. Output impedance ≤1 Ω.

**ELECTRICAL AND MECHANICAL**

POWER REQUIRED +12 V, 400 mA.

DIMENSIONS Standard single-width NIM module 3.43 X 22.13 cm (1.35 X 8.714 in.) per DOE/ER-0457T.

WEIGHT

Net 1 kg (2.2 lb).

Shipping 2.7 kg (5.9 lb).

### Ordering Information

To order, specify:

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<th>Model</th>
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<tr>
<td>FTA820A</td>
<td>Octal Fast Timing Amplifier (200 gain, noninverting)</td>
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