Established 1981
Advanced Test Equipment Rentals
www.atecorp.com 800-404-ATEC (2832)

Table 1-1. Specifications

INPUTS (Rear panel BNC)

FREQUENCIES: 10 MHz, 5 MHz, 1 MHz, or 100 kHz.
CHANNELS: Up to 3.
LEVEL: 0.3 to 3.0 volts rms.
INPUT IMPEDANCE: 50 ohms (1000 ohms on special order).

OUTPUTS (Rear panel BNC)

FREQUENCIES: 10 MHz, 5 MHz, 1 MHz, or 100 kHz.
CHANNELS: Up to 12.

LEVEL: 0 to 3 volts rms into a 50 ohm load (screwdriver level adjustments inside cover).
HARMONIC DISTORTION: Down more than 40 dB below rated output.
NON-HARMONIC DISTORTION: Down more than 80 dB below rated output.
CROSSTALK (Channel-to-Channel): -60 dB or more, measured channel-to-channel.

ISOLATION

LOAD (Open or short on any other channel).
AMPLITUDE CHANGE: <0.1 percent.
PHASE CHANGE: <0.1 ns at 5 or 10 MHz.
<0.5 ns at 1 MHz.
<5.0 ns at 100 kHz.

INJECTED SIGNAL: 1V signal up to 50 MHz applied to any output except 10 MHz, will be down more than 60 dB in all other outputs; 10 MHz output channel will be down more than 50 dB.

SSB PHASE NOISE (5 MHz): More than 145 dB below signal in 1 Hz BW for frequencies greater than 1 kHz from carrier.

SHORT TERM STABILITY DEGRADATION (5 MHz): $<1 \times 10^{-12}$ in 10 kHz band (1-second average).

ENVIRONMENTAL

TEMPERATURE: (MIL-E-16400, Class 4).
OPERATING: 0-50°C.
NON-OPERATING: -62 to +75°C.

STABILITY:
AMPLITUDE: ±0.5 dB, 0 to 50°C.
PHASE: <0.1 ns/°C, 5 and 10 MHz.
<0.5 ns/°C, 1 MHz.
<5 ns/°C, 100 kHz.

EMC: MIL-STD-461A.
HUMIDITY: 95% at 40°C.
ALTITUDE: Up to 30,000 ft.
SHOCK: MIL-T-21200, Class 1 and MIL-E-5400 (30 G's).
VIBRATION: MIL-STD-167.

POWER

AC INPUT: 115 or 230V ±10%, 48 to 440 Hz, 20 volt amperes, max.
DC INPUT: 22-30 VDC, 600 milliamperes, max.

DIMENSIONS: 88 mm high, 425 mm wide, 286 mm dee) (3-15/32" x 16-3/4" x 11-1/4").

WEIGHT: Typical, Option 031 — Net 15 lb (7 kg), shipping 22 lb (10 kg).

ACCESSORIES FURNISHED: Power cord 180 cm (6 ft), detachable mating connector 1251-0126 for EXT DC input, extender board, metal decal listing input and output frequencies.

ACCESSORIES AVAILABLE: Option 908 Rack Mounting Kit (see paragraph 1-20).

5087A Distribution Amplifier Mainframe

NORMAL CONFIGURATIONS (necessary input and output amplifier options included):

Option 031: 5, 1, and 0.1 MHz inputs and 4 outputs at each frequency.

Option 032: Single 5 MHz input and 12 outputs.

Option 033: Single 10 MHz input and 12 outputs.

Option 034: Single 5 MHz input, 4 each outputs at 5, 1, and 0.1 MHz.

SPECIAL CONFIGURATIONS (specify individual options and quantity):

INPUT CIRCUITS (up to 3 total):

Option 004: Input Preamplifier (0.1 to 10 MHz).
Option 005: 5 to 1 MHz Input Divider.
Option 006: 1 to 0.1 MHz Input Divider.
Option 011: 5 to 10 MHz Input Doubler.
Option 013: 10 to 5 MHz Input Divider.
Option 014: 10 to 1 MHz Input Divider.

OUTPUT AMPLIFIER (up to 12 total):

Option 001: 5 MHz Output Amplifier.
Option 002: 1 MHz Output Amplifier.
Option 003: 0.1 MHz Output Amplifier.
Option 012: 10 MHz Output Amplifier.