

SPECIFICATIONS PS1-A

PULSED NUCLEAR MAGNETIC RESONANCE SPECTROMETER

MAGNET - FIELD STRENGTH IN GAP 3500 GAUSS (NOMINAL)
GAP 1.1 inches
UNIFORMITY .01% over 1cm³ volume
CARRIAGE Horizontal - Vertical Motion ± 2 cm
TEMPERATURE COEFFICIENT 4 Gauss/^oc
WEIGHT 42 LBS.
LUBRICATE BEARINGS WITH WD-40

CASE WITH POWER SUPPLY

POWER SUPPLY - TRIPLE OUTPUT
+5 volts @ 6A
+15 volts @ 1A
-15 volts @ 1A
Line regulation $\pm .05\%$ for 10% line change
Ripple 2 mv rms maximum
Load regulation $\pm .05\%$ for 50% load change
Two empty slots for additional modules
WEIGHT 15 LBS.

PULSE PROGRAMMER PP-101

A-PULSE 1-30 ms 4 volt positive
B-PULSE 1-30 ms 4 volt positive
Delay Time 10 ms (0.01×10^0) - 9.99 s (9.99×10^3)
MODE: Internal, External Pulse, Manual
REPETITION TIME: 1 ms to 10 s
Meiboom - Gill Phase shift pulse
Scope Synchronizing Pulse either at A or B
NUMBER OF B PULSES: 0-99

OSCILLATOR / AMPLIFIER / MIXER PT-1501
15 MHz DIGITALLY SYNTHESIZED OSCILLATOR
FREQUENCY RESOLUTION 10 Hz
FREQUENCY ACCURACY: .005%
CW-RF OUTPUT LEVEL - 13 db
PEAK OUTPUT POWER 150 watts (nominal)
MIXER INPUT LEVEL: 50 mv rms (max)
MIXER OUTPUT LEVEL: 2 v rms (max)
MIXER BANDWIDTH: 500 KHz

RECEIVER PR 1501
CENTER FREQUENCY: 15 MHz (nominal) TUNABLE
BANDWIDTH 200 KHz (3db)
SENSITIVITY $8\mu V$ for full scale output
OUTPUT VOLTAGE / RANGE: 0-10 volts
GAIN RANGE: 60db (typical)
EQUIVALENT NOISE VOLTAGE: 1.5 mV rms
RF OUTPUT LEVEL: 50 mV for full scale signal
TIME CONSTANTS: .01, .03, .1, .3 ms

SAMPLE PROBE
TRANSMITTER COILS IN HELMHOLTZ CONFIGURATION
12 GAUSS ROTATING FIELD AT SAMPLE
RECEIVER COIL
SPECIAL CABLES FOR TRANSMITTER AND RECEIVER

SAMPLE STORAGE CASE
WITH 25 VIALS AND 5 O-RINGS

DUMMY SIGNAL AND TRANSMITTER PROBES.