

## 1.4 POWER REQUIREMENTS

The PRFS can be operated from either 115/220 Vac source at 47-400 Hz,  $\leq 25$  watts, steady state without changing the internal wiring of the unit.

## 1.5 SUPPLIED ACCESSORIES

The accessories supplied with the PRFS include the following:

- 1) AC line cord, Switchcraft, P/N 91-T-3261-1.
- 2) Fuse - 3A, 250 V, 3AG Slo-Blo Type.

## 1.6 OPTIONAL ACCESSORIES

The following accessories may be ordered from Efratom:

- 1) Spare fuses.

## 1.7 SPECIFICATIONS

The pertinent technical specifications for the PRFS are listed below:

### Electrical Performance:

<b>Outputs</b>	10 MHz sine 5 MHz sine 1, 5, or 10 MHz TTL (switchable)
<b>Sine Outputs Level/Loads (Ohms)</b>	0.85 $\pm$ 0.25 Vrms (50 $\Omega$ )
<b>Phase Noise (SSB 1 Hz BW)</b>	>110 dB @ 100 Hz from carrier >130 dB @ 1000 Hz from carrier
<b>Harmonic/Non-Harmonic Distortion</b>	>30 dBc (sine) / -65 dBc
<b>Aging</b>	5E-11/month (After 1 month of continuous operation)
<b>Frequency Accuracy at Shipment</b>	$\pm 5E-11$ (25°C)

*Portable Rubidium Frequency Standard*

<b>Frequency Retrace</b>	5E-11 (After 1 hour power on @ 25°C & up to 24 hours power off)
<b>Short-Term Stability</b>	1E-10, t = 1 sec 3.16E-11, t = 10 sec 1E-11, t = 100 sec
<b>Trim Range</b>	2E-9 nominal
<b>Setting Resolution</b>	1E-11
<b>Warm-up Characteristics</b>	<6 minutes to reach 1E-9 @ 25°C ambient
<b>Input Power</b>	25 W at 115/220 Vac  47-440 Hz (Fused)
<b>Environmental Specifications:</b>	
<b>Operating Temp. Range</b>	<3E-10 from 0°C to +50°C (Ambient)
<b>Storage Temp.*</b>	-40°C to + 60°C
<b>Altitude</b>	1E-13/mbar (sea level to 40,000 ft.)
<b>Magnetic Field Sensitivity</b>	≤ 4E-13/AM <sup>-1</sup> (worst case) (3E-11/gauss)
<b>Relative Humidity</b>	95%
<b>Weight</b>	<15.0 lbs.
<b>Size</b>	5.79 in. high x 10.13 in. wide x 11.38 in. long. (length doesn't include portable handle)
<b>Controls/Indicators</b>	Power (GRN) and Rb Lock (GRN) LED indicators Power ON/OFF switch
<b>Warranty</b>	1 year

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\* will not start up in temperatures below -10°C.