

ENCLOSURE #1

- 2.983 (a) NAME of MANUFACTURER**
MPD Technologies, Inc.
49 Wireless Boulevard
Hauppauge, New York 11788-3935
- 2.983 (b) IDENTIFICATION of EQUIPMENT**
Feed Forward Power Amplifier, Model FFPA 8689-120, Part Number EB501420. Combiner Shelf Assembly, Model HPC8689-400 Part Number EB501095.
- 2.983 (c) QUANTITY PRODUCTION**
Quantity production is planned.
- 2.983 (d) TECHNICAL DESCRIPTION of EQUIPMENT**
The FFPA 8689-120 is a multi-carrier feed forward power amplifier designed for cellular base station application. It is entirely solid-state and powered by an external 27 VDC power supply. A complete technical description is provided in the Installation, Operation, and Instructions Manuals {Enclosure 6&7}, and Detailed Circuit Diagrams {Enclosure 11}.
- 2.983 (d1) TYPES of EMISSION**
The emissions designators are TBD.
- 2.983 (d2) FREQUENCY RANGE**
869-894 MHz
- 2.983 (d3) RANGE of OPERATING POWER**
The amplifier has a fixed gain of 60 ± 0.25 dB. The output power is dependent on the applied input power. Under normal operating conditions the maximum average output power of 120 watts is not exceeded. The amplifier's dynamic range is 20 dB.
- 2.983 (d4) MAXIMUM POWER RATING**
The maximum RF output power rating is 120 watts average.
- 2.983 (d5) DC VOLTAGE & CURRENT of FINAL TRANSISTOR STAGE**
See enclosure 11
- 2.983 (d6) FUNCTION of ACTIVE DEVICES**
Refer to Enclosures 6,7 & 11.

- 2.983 (d7) COMPLETE CIRCUIT DIAGRAMS**
Refer to Enclosure 11.
- 2.983 (d8) INSTRUCTION BOOKS**
Refer to Enclosures 6&7.
- 2.983 (d9) Tune-Up Procedure**
The unit is aligned to specifications after being manufactured at the factory.
There are no user adjustments or tune-up procedures.
- 2.983 (d10) Description of Frequency Determining/Stabilizing Circuits and Devices**
The power amplifier does not affect the frequency characteristics of the signals that it amplifies.
- 2.983 (d11) Description of Circuits Suppressing Spurious & Limiting Power**
The unit is a solid-state linear power amplifier; no special or unusual circuitry is utilized to suppress spurious or limit power.
- 2.983 (d12) Description of Digital Modulation Methods Used**
The power amplifier does not modulate the external signals applied to it.
- 2.983 (e) Test and Measurement Data**
Underwriter Laboratories is providing all required test data.
- 2.983 (f) Photograph/Drawing of Equipment Identification Plate/Label**
Refer to Enclosure 8, Figures 8 & 12.
- 2.983 (g) Photographs of Equipment**
Refer to Enclosure 8, Figures 1-7 & 9-11 pictures.
- 2.983 (h) Encoder Devices**
Not applicable.
- 2.983 (i) Equipment for Use in Amateur Radio/RF Power Amplifier Kit**
Not applicable. The equipment is not available as a kit.
- 2.983 (j) AM Broadcast Stereophonic Exciter-Generator**
Not applicable.