

## Narrow Band High Power Amplifiers - Rackmount

### FEATURES:

- ❖ Coverage From 1MHz to 45.0 GHz
- ❖ Up to 1000 Watt Output Power (at 1dB Compression Point)
- ❖ Single Bias (+15VDC & +28VDC) Power Supply
- ❖ Compact/Rugged Thin-Film Construction
- ❖ Economically Priced



### DESCRIPTION:

### CNP- R Series

Cernex manufactures a solid-state linear design of broadband high power linear applications in the RF frequency range. This rack mount amplifier utilizes Power MOSFET Push-Pull devices that provide high gain, wide dynamic range, low distortions and good linearity. Exceptional performance, long term reliability and high efficiency are achieved by employing advanced broadband RF matching networks and combining techniques, built-in high quality power supply, EMI/RFI filters, and qualified components

### SPECIFICATIONS:

| Model Number | Frequency Range (MHz) | Gain (dB) Min. | SS Flatness (+/- dB) Max. | NF (dB) Max. | P1dB (dBm) Min. | IP3 (dBm) Typ. | VSWR In/Out Max. | VAC 100-260V @W Max. | Case Type       |
|--------------|-----------------------|----------------|---------------------------|--------------|-----------------|----------------|------------------|----------------------|-----------------|
| CNPH1V36463R | 1.5-31.5              | 64             | 2.0/0.5                   | 10(typ)      | 63              | 72             | 2:1(typ) (In)    | 8000                 | 17 x 14 x 22    |
| CNPH1V35453R | 1.5-32                | 54             | 1.5                       | 10           | 53              | 58             | 2:1(typ)         | 800                  | 19 x 5.25 x 22  |
| CNPH1V35656R | 1.5-32                | 56             | 1.5                       | 10           | 56              | 65             | 2:1(typ)         | 1875                 | 19 x 5.25 x 22  |
| CNPH1V36058R | 1.5-32                | 60             | 1.5                       | 10           | 58.5            | *              | 2:1(typ)         | 3400                 | 19 x 8.75 x 22  |
| CNPH2H55653R | 2-5                   | 56             | 1.0                       | 12           | 53              | 56             | *                | 120(typ)             | 19 x 3.5 x 18   |
| CNPV3U42453R | 30-400                | 24             | 1.5                       | 10           | 53              | 61             | *                | 40**                 | 19 x 5.25 x 22  |
| CNPV3U45453R | 30-400                | 54             | 1.5                       | 10           | 53              | 61             | *                | 1400                 | 19 x 5.25 x 22  |
| CNPV3U45654R | 30-400                | 56             | 1.5                       | 10           | 54.5            | 63             | 2:1              | 2000                 | 19 x 8.25 x 22  |
| CNPU1U25654R | 100-250               | 56             | 1.5                       | 10(typ)      | 54.5            | 62             | *                | 1800                 | 19 x 5.25 x 22  |
| CNPU1U26058R | 100-250               | 60             | 1.5                       | 10(typ)      | 58.5            | 65             | *                | 3000                 | 19 x 8.75 x 22  |
| CNPU3U74645R | 350-760               | 46             | 1.5                       | 10           | 45              | 55             | 2:1              | 250                  | 19 x 3.5 x 18   |
| CNPU3U75049R | 370-760               | 50             | 1.5                       | 10           | 49              | 58             | 2:1              | 400                  | 19 x 5.25 x 22  |
| CNPU4U44250R | 400-450               | 42             | 1.0                       | 20(typ)      | 50              | *              | 2:1(Min)         | 1100                 | 19 x 5.25 x 22  |
| CNPU4U44656R | 400-450               | 46             | 1.0                       | 10           | 56              | *              | 2:1(Min)         | 2300                 | 19 x 5.25 x 22  |
| CNPU4U46058R | 400-450               | 60             | 1.0                       | 10           | 58.5            | 68             | -10(Min)         | 3800                 | 19 x 8.75 x 22  |
| CNPU4U55453R | 400-500               | 54             | 1.0                       | 10           | 53              | 63             | -10(Min)         | 1500                 | 19 x 5.25 x 22  |
| CNPU4U56059R | 400-550               | 60             | 1.0                       | 10           | 59              | 69             | -10(Max)         | 5000                 | 17 x 14 x 22    |
| CNPU8U96059R | 800-900               | 60             | 2.0                       | 10(typ)      | 59              | 69             | *                | 5000                 | 17 x 14 x 22    |
| CNPU8015252R | 800-1000              | 52             | 1.0                       | 10           | 52              | 62             | -10(Max)         | 800                  | 19 x 5.25 x 22  |
| CNP19204040R | 19800-20000           | 40             | 0.5                       | -            | 40              | 48             | 2:1              | 450                  | 19 x 17.5 x 9.3 |



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|--------------|-----------------------|----------------|---------------------------|--------------|-----------------|----------------|------------------|----------------------|------------------|
| CNPU8015655R | 800-1000              | 56             | 1.5                       | 10           | 55              | 62             | *                | 1800                 | 19 x 5.25 x 22   |
| CNP01016464R | 1025-1150             | 64(typ)        | *                         | 20(typ)      | 64              | *              | *                | 500(typ)             | 19 x 8.75 x 22   |
| CNP01015050R | 1000-1400             | 50             | 1.0                       | 10           | 50Psat          | 61             | 2:1              | 600                  | 19 x 5.25 x 22   |
| CNP01015250R | 1000-1400             | 52             | *                         | 14           | 50.5Psat        | 60             | 2:1              | 1200                 | 19 x 5.25 x 22   |
| CNP01015059R | 1000-1500             | 50             | 0.75                      | 10(typ)      | 59(Max)Psat     | 60/57          | -10(Min)         | 800                  | 19 x 8.75 x 22   |
| CNP01015047R | 1000-1400             | 50             | 1.0                       | 10           | 47              | 62             | *                | 900                  | 19 x 8.75 x 22   |
| CNP01014653R | 1200-1300             | 46             | 1.0                       | 10           | 53              | 64             | 1.5:1 typ        | 1500(typ)            | 19 x 8.75 x 22   |
| CNP01016060R | 1600-1700             | 60             | 1.0                       | 10           | 60              | *              | 2:1(typ)         | 9600                 | 21.8 x 33.5 x 30 |
| CNP01015049R | 1700-1900             | 50             | 1.0                       | 10           | 49              | 58             | 2:1              | 600                  | 19 x 5.25 x 22   |
| CNP01016057R | 1750-1850             | 60             | 1.0                       | 10           | 57.5            | 67             | 2:1(typ)         | 7000                 | 22 x 31.5 x 25   |
| CNP01023646R | 1800-2200             | 36             | 1.5                       | 27           | 46.5            | 56             | 1.5:1            | 300                  | 19 x 3.5 x 18    |
| CNP01024846R | 1800-2200             | 48             | 1.5                       | 10           | 46.5            | 56             | 2:1              | 300                  | 19 x 3.5 x 18    |
| CNP02025251R | 2025-2120             | 52             | 1.0                       | 10           | 51.5            | 60             | -10(Max)         | 800                  | 19 x 5.25 x 22   |
| CNP02024545R | 2200-2300             | 45             | 1.0                       | 10           | 45              | 54             | 2:1              | 250                  | 19 x 3.5 x 18    |
| CNP02025250R | 2425-2475             | 52             | 1.0                       | 10(typ)      | 50.5            | 61             | -10(Min)         | 1600                 | 19 x 5.25 x 22   |

OTHER FREQUENCY BANDS & HIGHER POWER ARE ALSO AVAILABLE.

\* CONSULT THE FACTORY.

\*\* Current @+28VDC

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE