

Rack-Mount Power Amplifiers 0.5 GHz to 18 GHz

- ✓ **Solid-State Power Amplifiers from 0.5 to 100 Watts**
- ✓ **Worldwide Applications: UHF – Ka-Band (0.5 GHz to 31 GHz)**
- ✓ **Employing GaN and GaAs Technologies**
- ✓ **Custom Engineered Options (CEOs) (See page 14)**
- ✓ **MIC Thin-Film Design for High Reliability**
- ✓ **TTL Controlled Pulsed Amplifiers Available**



CTT's 19-inch rack-mount amplifiers are designed for wide or narrow band linear applications covering UHF through Ka-Band (0.5 to 31 GHz). Solid-state power transistors (Bipolar, GaAs or GaN) are used to achieve high MTBF.

The RP series are designed to operate in the linear region to maximize third order intercept point, while the RS series operate in the saturated mode to achieve maximum output power. The RG series employ GaN devices to achieve higher power, wide bandwidth and efficiency.

Cooling fans and heat sinks are built-in to keep the junction temperature of the

transistors in a safe operating region. All units have EMI/RFI filter, built in regulator and/or sequential bias circuit for protection. Output power monitor, RF connectors, waveguide input or output, alarm circuitry, attenuator or DC-DC converter are optional.

These units are ideally suitable for commercial and industrial applications which need low maintenance, good performance and high reliability. They are most suitable for TWT replacement, driver amplifier, transmitter, ground stations and point-to-point communication requirements.

Contact CTT with your specialized application requirements.

Rack-Mount Power Amplifiers, 0.5 GHz to 18 GHz

| Model Number | Frequency (GHz) | Gain (dB) | Gain Flatness (±dB) | Noise Figure (dB) | P1dB (+dBm) | P3dB (+dBm) | Psat (+dBm) | VSWR (In/Out) | Case Size (Inches) |
|----------------------|------------------|-----------|---------------------|-------------------|-------------|-------------|-------------|---------------|-----------------------|
| | | Min | Max | Max | Min | Min | Min | Max | W x H x D |
| RPM/020-4040 | 0.5–2.0 | 40 | 2.00 | 5.0 | 40 | – | – | 2.0:1 | 19 x 5.25 x 17 |
| RPO/020-4040 | 1.0–2.0 | 40 | 1.50 | 5.0 | 40 | – | – | 2.0:1 | 19 x 5.25 x 17 |
| RPO/040-4047 | 2.0–4.0 | 47 | 2.00 | 5.0 | 40 | – | – | 2.0:1 | 19 x 5.25 x 17 |
| RPM/060-3944 | 2.0–6.0 | 44 | 2.00 | 5.0 | 39 | – | – | 2.0:1 | 19 x 5.25 x 17 |
| RPM/060-4148 | 2.0–6.0 | 48 | 2.00 | 5.0 | 41 | – | – | 2.0:1 | 19 x 5.25 x 17 |
| RPO/080-3942 | 4.0–8.0 | 42 | 2.00 | 5.5 | 39 | – | – | 2.0:1 | 19 x 5.25 x 17 |
| RPX/0218/2742 | 2.0–18.0 | 42 | 2.50 | 7.0 | 27 | – | – | 2.0:1 | 19 x 3.50 x 17 |
| RSM/180-4040 | 6.0–18.0 | 40 | 2.50 | 8.0 | – | – | 40 | 2.0:1 | 19 x 5.25 x 17 |
| RPW/265-3030 | 18.0–26.5 | 30 | 2.50 | 8.0 | 30 | – | – | 2.0:1 | 19 x 5.25 x 17 |
| RSN/050-5050 | 4.4–5.0 | 50 | 1.00 | 5.5 | – | – | 50 | 2.0:1 | 19 x 7.00 x 17 |
| RSN/058-4747 | 5.25–5.8 | 47 | 1.50 | 7.0 | – | – | 47 | 2.0:1 | 19 x 5.25 x 17 |
| RPN/085-4340 | 7.7–8.5 | 40 | 1.00 | 7.0 | 43 | – | – | 2.0:1 | 19 x 5.25 x 17 |
| RSN/096-4646 | 8.5–9.6 | 46 | 1.25 | 8.0 | – | – | 46 | 2.0:1 | 19 x 5.25 x 17 |
| RSN/096-4848 | 9.0–9.6 | 48 | 1.25 | 8.0 | – | – | 48 | 2.0:1 | 19 x 5.25 x 17 |
| RSN/105-4646 | 9.5–10.5 | 46 | 1.25 | 8.0 | – | – | 46 | 2.0:1 | 19 x 5.25 x 17 |
| RPN/145-4343 | 14.0–14.5 | 43 | 1.25 | 8.0 | 43 | – | – | 2.0:1 | 19 x 5.25 x 17 |
| RPN/149-4343 | 14.4–14.9 | 43 | 1.50 | 8.0 | 43 | – | – | 2.0:1 | 19 x 5.25 x 17 |
| RPN/154-4343 | 14.4–15.4 | 43 | 1.50 | 8.0 | 43 | – | – | 2.0:1 | 19 x 5.25 x 17 |
| RSN/310-3940 | 30.0–31.0 | 40 | 1.50 | 8.0 | – | – | 39 | 2.0:1 | 19 x 5.25 x 17 |
| RGM/020-4444 | 0.5–2.0 | 44 | 2.00 | 6.0 | – | 44 | – | 2.0:1 | 19 x 5.25 x 17 |
| RGO/020-4747 | 1.0–2.0 | 47 | 2.00 | 6.0 | – | 47 | – | 2.0:1 | 19 x 5.25 x 17 |
| RGO/030-4747 | 1.5–3.0 | 47 | 2.00 | 6.0 | – | 47 | – | 2.0:1 | 19 x 5.25 x 17 |

New Products

Rack-Mount Power Amplifier Comments:

1. CTT has more models available, please contact the factory for different specifications or options.
2. Industry standard 19-inch rack.
3. For screening options contact the factory.
4. All specifications guaranteed at +25°C. Units will safely operate -20°C to +60°C.
5. Specifications listed are subject to change without notice.