# RF Amplifier Module GammaS Series 5MHz-310MHz

- NMR, MRI, EPR
- RADAR
- Ultrasonics
- Test & Measurement
- RF therapy


*Module with optional heatsink and fans*

- Rugged, high reliability design
- Excellent phase and amplitude stability
- Compact and easy to use
- Fast pulse rise and fall times
- Low interpulse noise

## BTM00300-GammaS

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|---|---|
| **Model number** | BTM00300-GammaS |
| **Rated output power** | 300W PEP minimum in pulsed mode/30W in CW mode |
| **P1dB** | 240W PEP minimum in pulsed mode |
| **Type** | Class AB MOSFET |
| **Frequency** | 5-310MHz |
| **Gain flatness** | ±2dB maximum (measured at 1/10th rated output power) |
| **Max.duty cycle** | 20% in pulsed mode at max.pulse width |
| **Max.pulse width** | 300ms |
| **Pulse droop** | 5% maximum |
| **Pulse rise and fall time** | <150ns typical using a pre-gated RF input signal |
| **Gate delay** | Rising edge: 1µs typical Falling edge: 200ns typical |
| **Harmonics** | Odd: -12dBc maximum Even:-20dBc maximum |
| **Spurious** | <-70dBc |
| **Output noise (blanked)** | <10dB above thermal (1MHz bandwidth) |
| **Phase change/power** | 20º typical from -40dB to full power |
| **Phase stability** | 6º across 300ms pulse |
| **DC supply** | 50V max. at approx. 5A |
| **Input/output impedance** | 50Ω nominal |
| **Maximum load SWR** | Tolerates at least 3:1 @ full rated power without damage<br>External VSWR protection is recommended |
| **Remote interface** | 9-pin D connector provides Temp monitor, Current monitor,<br>PTT in, Gate in, Gain adjust |
| **Protection** | Over-temp, reverse polarity, input/output transients |
| **Connectors** | RF input and output: SMA or N-type |
| **Cooling** | Requires an adequate heatsink (available as an option) |
| **RF drive** | 0dBm nominal, +10dBm for no damage<br>CW mode automatically enabled for RF drive <-10dBm approx. |
| **RF gate(blanking)** | CMOS/TTL compatible |
| **Physical** | 120mm x 200mm x 37mm, weight 1.3kg |
| **Compliance** | CE |

*Optional extras: Suitable heatsink, built-in fans*