The BT-Gamma series is a range of class AB RF power amplifiers covering the 5MHz to 400MHz frequency range.

- Rugged, solid-state design - high reliability
- Extremely high phase and amplitude stability
- Very fast pulse rise/fall times
- High linearity
- Very low interpulse noise
- Competitively priced
Typical Performance Plots

Peak output power for 0dBm RF drive

- Frequency/MHz vs. Power/W
- Frequency/MHz: 1.000 to 100.000
- Power/W: 0.000 to 400.000

Harmonics

- Frequency/MHz vs. Harmonic level/dBc
- Frequency/MHz: 1.000 to 100.000
- Harmonic level/dBc: -70.000 to 0.000

Peak output power at 1dB compression

- Frequency/MHz vs. Power/W
- Frequency/MHz: 1.000 to 100.000
- Power/W: 0.000 to 400.000

Gain as a function of input power

- Input power/dBm vs. Gain/dB
- Input power/dBm: -25 to 10
- Gain/dB: 46.0 to 58.0

Maximum input power for auto-CW operation

- Frequency/MHz vs. Input power/dBm
- Frequency/MHz: 1.000 to 100.000
- Input power/dBm: -15.000 to 0.000

Small signal gain measured at 10% of maximum rated power

- Frequency/MHz vs. Gain / dB
- Frequency/MHz: 1.000 to 100.000
- Gain / dB: 50.0 to 60.0
### Mechanical Specifications

<table>
<thead>
<tr>
<th>Connectors</th>
<th>RF IN:</th>
<th>BNC female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GATE:</td>
<td>BNC female</td>
</tr>
<tr>
<td></td>
<td>RF SAMPLE:</td>
<td>BNC female</td>
</tr>
<tr>
<td></td>
<td>RF OUT:</td>
<td>N type female</td>
</tr>
<tr>
<td></td>
<td>INTERFACE:</td>
<td>DB25 female</td>
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</table>

Other connectors types available on request.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Chassis size:</th>
<th>450mmW (17.7”W) x 500mmD (19.7”D) x 129mmH (5.1”H)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total size:</td>
<td>482mmW (19”W) x 563mm (22.2”D) x 131mm (5.2”H)</td>
</tr>
<tr>
<td>Rack compatibility</td>
<td>19” 3RU</td>
<td></td>
</tr>
</tbody>
</table>

| Weight              | approx. 13kg (28lbs) |

| Enclosure classification | IP20 |

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**DC POWER**

**ENABLE**

**RF POWER**

**OVER DUTY**

**DC ERROR**

**MISMATCH**

**OVER TEMP**

**SHUTDOWN**

**SELECTED**

---

**RF Power Amplifier**

---

THIS EQUIPMENT MUST BE EARTHED

---

**CAUTION**

---

**RF IN**

**GATE**

**RF SAMPLE**

**RF OUT**

---

**T E C H N O L O G I E S**

---

**WARNING**

---

**HIGH RF VOLTAGE**

---

**DANGER**

---

**INTERFACE ADDRESS**

---

**ADDRESS**

---

**RF Power Amplifier**

---

**T E C H N O L O G I E S**

---

**DIMENSIONS**

---

**131mm (5.2”)**

**563mm (22.2”)**

**500mm (19.7”)**

**450mm (17.7”)**

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**www.tomcorf.com**

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**DS006679A**

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**BT00100-Gamma**
Protection

Load VSWR | Tolerates up to VSWR 3:1 at full rated power without shutdown. Self-resetting shutdown protection activates if VSWR limits are exceeded.

Over temperature | Self-resetting shutdown protection activates if thermal limits are exceeded.

Duty cycle | Duty cycle limit is determined from the GATE signal duty cycle. Self-resetting shutdown protection activates if duty cycle limit is exceeded. If output power is less than approx. 10% of maximum rated power, duty cycle protection is disabled and auto-CW operation is available.

Pulse width | Pulse width limit is determined from the GATE signal pulse width. Self-resetting shutdown protection activates if pulse width limit is exceeded.

Monitoring and Control

Front panel switches | Power (turns on DC power), Enable (enables RF).

Front panel LEDs | DC POWER, ENABLE, RF POWER, DC ERROR, MISMATCH, OVER TEMP, OVER DUTY, SELECTED, SHUTDOWN.


Environmental

General | Intended for use only in controlled, indoor environment. Non-consumer product for industrial and scientific use.

Cooling | Forced air, front to rear.

Operating temperature | +5°C to +40°C

Storage temperature | -20°C to +60°C

Humidity | 80% for temperature up to 31°C, decreasing linearly to 50% relative humidity at 40°C

Operating altitude | Up to 2000m

Pollution degree | 2

Transient voltage compatibility | Category II, in line with IEC 60364-4-44:2007

Electromagnetic compatibility | In line with IEC61326-1:2012. ISM equipment, Group 1, Class A. For use only in shielded areas. ENCS011 (CISPR 11) limits exceeded by up to 40dB

Safety | In line with IEC61010-1:2010

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