Model #: 5T500M  Frequency Range: 5-245 MHz

### Specifications*

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating frequency</td>
<td>5-245 MHz</td>
</tr>
<tr>
<td>Pulse power into 50 ohms</td>
<td>500 W (min.)</td>
</tr>
<tr>
<td>CW power</td>
<td>50 W (min.)</td>
</tr>
<tr>
<td>Pulse width</td>
<td>20-100 msec typical. 300 msec maximum, depends on output power. Consult CPC for details.</td>
</tr>
<tr>
<td>Linearity (+/- 1 dB, class AB )</td>
<td>500 W (min.)</td>
</tr>
<tr>
<td>Gain (0 dBm input)</td>
<td>+ 57 dB (nominal)</td>
</tr>
<tr>
<td>Gain flatness</td>
<td>+/-3 dB, typ.</td>
</tr>
<tr>
<td>Harmonic content (2nd/3rd)</td>
<td>-20 dB/-12 dBc, typ.</td>
</tr>
<tr>
<td>Input/Output impedance</td>
<td>50 ohms (nominal)</td>
</tr>
<tr>
<td>Input VSWR</td>
<td>Less than 2:1</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>10% (max.)</td>
</tr>
<tr>
<td>Amplitude rise/fall time</td>
<td>500 ns, typ.</td>
</tr>
<tr>
<td>Amplitude droop</td>
<td>5% to 20 ms, typ., 8% max.</td>
</tr>
<tr>
<td>Phase change / output power</td>
<td>12° to rated power; typ. 25° max.</td>
</tr>
<tr>
<td>Phase error overpulse</td>
<td>5° to 10 ms duration, typ.</td>
</tr>
<tr>
<td>Noise figure</td>
<td>12 dB typ.</td>
</tr>
<tr>
<td>Output noise (blanked)</td>
<td>20 dB over thermal, typ.</td>
</tr>
<tr>
<td>Blanking delay</td>
<td>1 μs, typ., on/off, TTL signal</td>
</tr>
</tbody>
</table>

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System Features

Protection functions:
- Auto/manual fault reset
- Maximum forward power
- Maximum average power
- Maximum VSWR
- Over temperature
- Power supply over voltage

Controls, front panel:
- AC power on/off
- Forward/Reflected RF Power
- Fault reset
- Low power mode

Connectors, rear panel:
- AC mains, Receptacles, EMI filtered
- RF input: BNC (F)
- RF output: Type N (F)
- Noise blanking: BNC (F) dual polarity
- Interface: 25 pin D (F), EMI filtered
- Fwd/Ref RF sample: SMA (F)
- Protective ground: threaded bolt

Front panel indicators:
- AC power on
- Standby mode
- RF overdrive fault
- VSWR fault
- Energy fault
- CW mode
- Power supply status
- Thermal fault
- Blanking (Gate)
- Power limit select, Hi/Lo

Interface functions:
- (C= Control Input  F= Flag Output)
- CW mode (C/F)
- Power supply (F)
- Thermal (F)
- Energy (F)
- Standby (C/F)
- RF overdrive (F)
- VSWR (F)
- Power limit select Po or Po/2 (C/F)

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Environmental

- Cooling: Internal forced air, front to back flow
- Operating temperature: +10 to 40°C
- AC line voltage: 208 VAC, +/-10%, 47-63 Hz
- Chassis size: 8.75 x 19 x 26 (HWD, inches)  Rack mountable
- Net weight: 85 lbs. (approx.)
- Compliance: CE, UL 2601 upon request

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