

T4026 Series



MAIN FEATURES

- Intuitive user interface
- Rugged Modular Design Construction
- USB, Ethernet, GPIB and RS232 interface
- 3 year warranty (1 Year on the tube)
- Solid State Powe Supply

Instruments for Industry, T4026 Series Amplifiers provide outstanding RF performance and incorporate the latest features with respect to control and monitoring. These amplifiers have field proven reliability and are available in a wide range of power levels from 25 watts to 200 watts in the 26.0 GHz – 40.0 GHz frequency range.

Operation safety and ease of use are paramount in IFI product designs. The T4026 Series include a full complement of RF and hardware protection systems including high VSWR, over-current and voltage protection as well as redundant thermal and airflow sensors to prevent the TWT from overheating. In addition, the T4026 series includes a touch screen interface that is sophisticated, comprehensive, but yet simple to use. Our amplifiers feature modular construction and this concept of modular design minimizes internally produced EMI signal leakage and provides easy access for field service and rapid turnaround at depot level repair facilities.

The touch screen interface shows forward/reverse power indication, system status and self-diagnostic information. All the amplifier operating parameters are simultaneously available via the amplifier interface as well as over the remote bus. Selection controls allow you to switch the amplifier to the desired mode of operation for local control if the unit is not being operated remotely. For remote operation GPIB, RS232, USB & Ethernet remote interfaces are included as standard.To meet individual application needs, the T4026 Series amplifiers can be easily customized with harmonic filters or other options. With this capability and its reliable elegant design, the T4026 series amplifiers are the perfect amplifier for your microwave needs. IFI offers different size packages and configurations to best suit your application. A product and design built to last!

| Model Number | Frequency Range | Rated Power | Gain | Mains Power | Weight | Size |
|--------------|----------------------|-------------|-------|-------------|--------|------------------------------------|
| T4026-100 | 26.5 GHz - 40 GHz | 100 W | 50 dB | 1.9 kVA | 40 kg | 19 inch, 8U Rack Case, 680 mm Deep |
| T4026-200 | | 200 W | 53 dB | 3.5 kVA | 90 kg | Rack Intagreated |
| T4026-25 | | 25 W | 44 dB | 0.8 kVA | 20 kg | 19 inch, 3U Rack Case, 680 mm Deep |
| T4026-40 | | 40 W | 46 dB | 0.9 kVA | 20 kg | |
| T4026-50 | | 50 W | 47 dB | 1 kVA | 20 kg | |

Models & General Specifications





| RF Specifications | | | | | |
|------------------------|---|--|--|--|--|
| Modulation Formats | AM, FM Pulse | | | | |
| Output VSWR Tolerance | < 3:1, Infinite any phase > 3.1 Safety Trip) | | | | |
| Stability | Unconditional | | | | |
| Output Impedance | 50 Ohm | | | | |
| Input VSWR | 2.0:1 | | | | |
| Output VSWR | 2.5:1 | | | | |
| Spurious (typ.) | 50 dBc | | | | |
| General Specifications | | | | | |
| Safety Interlock | Via rear panel mounted BNC-female | | | | |
| Supply Voltage | < 3KVA Single Phase 90 to 264 VAC, > 3KVA Three Phase, 5 Wire STAR, 380 to 415 VAC / 4 Wire Delta, 208 to 240 VAC | | | | |
| Supply Frequency | 47 to 63 Hz | | | | |
| RF Input Connector | Туре К | | | | |
| RF Output Connector | WR42 | | | | |
| Com. Interface | GPIB, RS232, Ethernet & USB | | | | |
| Cooling System | Air Cooled, Self-contained | | | | |
| Available Options | Option 129, VSWR Reflected Power Protection "Graceful Degradation" which will automatically reduce the input drive and foldback the output power when the average reflected exceeds a preset limit of 3:1 Option 118R, RF Panel RF Connectors Option 118F, Front Panel Reflected RF Sample Port, -40, -50, -60 dB | | | | |

Available Products

| Product | Description |
|-----------|---|
| T4026-100 | 26.5 to 40.0 GHz TWT Microwave Power Amplifier, 100 W |
| T4026-200 | 26.5 to 40.0 GHz TWT Microwave Power Amplifier, 200 W |
| T4026-25 | 26.5 to 40.0 GHz TWT Microwave Power Amplifier, 25 W |
| T4026-40 | 26.5 to 40.0 GHz TWT Microwave Power Amplifier, 40 W |
| T4026-50 | 26.5 to 40.0 GHz TWT Microwave Power Amplifier, 50 W |



Option 118R, Rear Panel Reflected RF Sample Port, -40, -50, -60 dB Option 129, Harmonic Filter mounted either internally, externally or

separate chassis mounted. (amplifier variant dependent)