T4026 Series Medium to High Power Millimeter TWT Amplifiers
26.5 – 40.0 GHz • 10-200 watts, Minimum Rated Power

Instruments for Industry, T4026 Series Amplifiers provide outstanding RF performance. Our "T4026 Series" products are a mature design but incorporate the latest features with respect to control and monitoring. These amplifiers are "State of the Art"; have field proven reliability and unsurpassed performance as the best in the industry. These products are available in a wide range of power levels from 10 watts to 200 watts in the 26.5GHz-40.0GHz frequency range.

Operation safety and ease of use are paramount in *IFI* product designs. The IFI 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 state-of-the-art 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 backlit LCD screen shows forward/reverse power indication, system status and self-diagnostic information. All the amplifier operating parameters are simultaneously available in the amplifier front panel display as well as over the remote bus. Selection switches allow you to switch the amplifier to the desired mode of operation for local control if the unit is not being operated remotely.

For computer automation both an RS-232 and IEEE-488 interface are included. 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!

IFI RF Power Amplifier Features:

- ∞ Instantaneous Broadband Frequency range
- ∞ Modular Design Construction
- ∞ Rugged Construction & High Reliability
- ∞ Backlit LCD Display
- ∞ Integrated Force Air Cooling
- ∞ Self-diagnostic circuitry
- ∞ IEEE-488 interface, RS232 & Ethernet Remote available
- ∞ Solid State Power Supply

Models & General Specifications:

Model Number	Frequency Range (GHz)	Rated Power (watts minimum)	P1dB Power (nominal)	Gain (dB min)	Mains (kVA)	Weight (Pounds)	Size (Inches)
T4026-10	26.5-40.0	10	8	40	0.7	45	5.25"H x 19"W x 24.00"D
T4026-25	26.5-40.0	25	10	44	0.8	45	5.25"H x 19"W x 24.00"D
T4026-40	26.5-40.0	40	20	46	0.9	45	5.25"H x 19"W x 24.00"D
T4026-50	26.5-40.0	50	25	47	1.0	45	5.25"H x 19"W x 24.00"D
T4026-80	26.5-40.0	80	35	49	1.8	80	14.0"H x 19"W x 25.25"D
T4026-100	26.5-40.0	100	45	50	1.9	90	14.0"H x 19"W x 25.25"D
T4026-125	26.5-40.0	125	50	52	2.0	100	14.0"H x 19"W x 25.25"D
T4026-200	26.5-40.0	200	100	53	3.5	200	2x 14.0"H x 19"W x 27.00"D

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Specifications subject to change without notice   Page 1   ds-t4026-series rev-a-3/18/2011

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Standard Features for IFI T4026 Series TWT Amplifiers	
Standard Features	VSWR Reflected Power Protection, the unit operates without damage or oscillation into any magnitude of phase or load impedance, Open & Short Circuit Protection.
	* Alternate Prime Power (specify at time of order)
	GPIB IEEE 488 & RS232 Remote Control
	RF Sample Port on the Front Panel, 112R for rear panel
	Internal Pre-amplification to obtain rated output power with an input level of 0 dBm or less.
	RF Input/Output Connectors on the Front Panel, 118R for rear panel
	Internal Systems Diagnostics & Status Indicators
	Filament/Beam Elapsed Time Metering in hours
	RF Safety Interlock
	Forward/Reflected Power Indication simultaneously on Front Panel display

Specifications:	
Frequency Range:	As Specified in Model Table
Rated Output Power:	As Specified in Model Table
Gain @ Rated Power:	As Specified in Model Table
Prime Power:	As Required for Customer (Some are listed below)
Input/output Impedance:	50 ohms
RF Input/ Sample Connectors:	Type K Female, unless specified otherwise
RF Output Connector:	WR28 Other waveguides available by request or specification (see Option 117)
Input VSWR:	2.0:1
Output VSWR:	2.5:1
Operating Temp:	0º to 50º C
Non-operating Temp/Altitude:	-40º to 70º C (50,000 feet max)
Humidity:	95% without condensation
Operating Altitude:	10,000 feet
Cooling System:	Air cooled, self-contained
Modulation:	All types, AM, FM, Pulse
Configuration:	Rack Mount as specified in Model Table, or Cabinet Integrated as needed
Spurious Outputs:	<-60 dBc nominal

Standard Prime Powers:
100, 115, 120 VAC ±10% 50/60 Hz, single phase
200, 220, 230, 240VAC ±10% 50/60 Hz, single phase
100/200VAC,115/208 or 200/220/230/240VAC ±10% 50/60 Hz, three phase Wye or Delta and/or 400 Hz power is available.
Special Prime Powers other then listed are subject to availability

Some Available Options for IFI T4026 Series TWT Amplifiers	
Option 103 G/D:	VSWR Reflected Power Protection "Graceful Degradation Feature" which will automatically reduce the input drive and fold back the output power when the average reflected power exceeds a preset limit of 3.0:1. The unit operates without damage or oscillation into any magnitude of phase or load impedance.
Option 110-1E:	GPIB IEEE-488 RS232 and Ethernet Remote Control
Option 110-2:	GPIB IEEE-488 and RS 422 Remote Control
Option 110-3	GPIB IEEE-488 and RS 485 Remote Control
Option 113:	Chassis Slides for 19" Rack Mounting
Option 118F or R:	Front Panel RF Connections 118R for Rear Panel RF Connections
Option 123F or R:	Reflected RF Sample Port -40, -50 or -60dB N or SMA, Front or Rear Panel

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Outline Configurations:

5.25" High Chassis Outline

14" High Chassis Outline

2x 14" High Chassis Outline