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Data Sheet

August 14, 2026

AMPLIFIER RESEARCH

Amplifier Research 15T4G18M1

Amplifier Research 15T4G18M1 Solid State RF Amplifier The Amplifier Research 15T4G18M1 is a self-contained air-cooled solid-state broadband amplifier providing 15 W CW minimum from 4.0 GHz to 18.0 GHz. OEM 15T4G18M1 catalog and datasheet materials list instantaneous bandwidth, high gain, mismatch tolerance, and IEEE-488/RS-232 remote interfaces on the T4G18 platform. RF susceptibility testing, antenna and component testing, wattmeter calibration, and broadband driver service from 4.0 GHz to 18.0 GHz. The Amplifier Research 15T4G18M1 is a self-contained air-cooled solid-state broadband amplifier providing 15 W CW minimum from 4.0 GHz to 18.0 GHz. OEM 15T4G18M1 catalog and datasheet materials list instantaneous bandwidth, high gain, mismatch tolerance, and IEEE-488/RS-232 remote interfaces on the T4G18 platform. RF susceptibility testing, antenna and component testing, wattmeter calibration, and broadband driver service from 4.0 GHz to 18.0 GHz. Forward and reflected power monitoring class Safety interlock rear panel connector class



MODEL

**Amplifier Research
15T4G18M1**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

15T4G18M1

LISTING

<https://aumictechlabs.com/products/15t4g18m1-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Amplifier Research 15T4G18M1 is a solid-state TWT microwave amplifier delivering 15 W CW output across 4.2–18 GHz instantaneous bandwidth. This forced-air-cooled unit combines high gain, broadband coverage, and inherent mismatch tolerance - operating without damage across

any load impedance magnitude or phase. Forward and reflected power display via front-panel digital interface enables real-time monitoring and menu-driven system status access.

Technical Specifications

Frequency Range: 4.2–18 GHz instantaneous bandwidth

Power Output: 15 W CW minimum (at output connector) 10 W in low harmonic modes 7 W minimum linear at 1 dB compression

Gain: 41.0 dB typical

Harmonic Distortion:

- 4.2–4.5 GHz: –0 dBc maximum, –1 dBc typical
- 4.5–5 GHz: –1 dBc maximum, –2 dBc typical
- 5–7 GHz: –2.5 dBc maximum, –4 dBc typical
- 7–10 GHz: –5 dBc maximum, –9 dBc typical
- 10–12 GHz: –8 dBc maximum, –12 dBc typical
- Above 12 GHz: –20 dBc maximum, –30 dBc typical

Impedance: 50 ohms

Power Input: 99–260 VAC, 50–60 Hz, single phase

Key Features

- Mismatch-tolerant design operates without damage or oscillation across any source and load impedance
- Output power foldback protection safeguards against excessive reflected power
- Faithful reproduction of AM, FM, and pulse modulation on input signal; AM peak envelope power limited to specified output
- Self-contained forced-air cooling for simplified deployment

Interfaces

- RF Input: Type N female (rear panel)
- RF Output: Type TNC female (rear panel)
- RF Output Sample Port: Type N female (rear panel)
- GPIB: IEEE-488 connector (f)
- Interlock: DB-15 female (rear panel)

Typical Applications

Microwave testing, radar systems, and communication signal amplification demanding wide instantaneous bandwidth and moderate power output.

15T4G18M1 Characteristics / Specifications

PARAMETER	VALUE
Rated Output Power	15 watts minimum
Input For Rated Output	1.0 milliwatt maximum
Frequency Response	4.0 GHz to 18.0 GHz instantaneously
Gain At Maximum Setting	42 dB minimum
Gain Adjustment Continuous Range	18 dB minimum class remote stepped
Flatness Class	plus or minus 1.5 to 3.0 dB class by model family sheet
Power Output At Compression Class	see model datasheet P1dB and P3dB rows
Input Impedance	50 ohms, VSWR 2.0:1 maximum class
Output Impedance	50 ohms nominal
Mismatch Tolerance	operates without damage into high VSWR loads class
Modulation Capability	Faithful AM FM pulse reproduction
Harmonic Distortion Class	minus 20 dBc class at rated power family
Remote Interfaces	IEEE-488 and RS-232
RF Connector Class	TypeNfemale class
Cooling	Forced air self contained fans
Form Factor	Portable benchtop or rack amplifier class
Series Family	Amplifier Research 15T4G18M1
Export Classification Class	EAR99 family class
Primary Power Class	universal AC mains auto ranging class
ALC Leveling	available class
Safety Interlock	rear panel interlock class
Device Technology Class	TWT microwave

15T4G18M1 Specifications

PARAMETER	VALUE
Amplifier Research 15T4G18M1 Solid State RF Amplifier	Overview
Applications	RF susceptibility testing, antenna and component testing, wattmeter calibration, and broadband driver service from 4.0 GHz to 18.0 GHz.
Technical Specifications	Rated Output Power: 15 watts minimum

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes	
Rated power, band, and gain from Amplifier Research 15T4G18M1 OEM catalog/datasheet summaries. Quote the exact configuration sheet for compression flatness mass and primary-power draw; do not assume sibling compression rows.	

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.