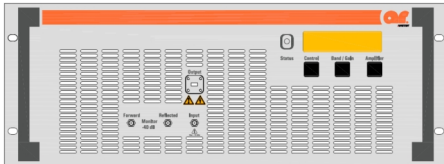


TECHNICAL SPECIFICATION



AR18K26-100

18.0 - 26.5 GHz 100 Watt Solid State Amplifier



The Model AR18K26-100 is a solid-state, Class A-AB design, self-contained, air-cooled, broadband power amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required. It will provide a minimum of 100 W across its operating bandwidth of 18 - 26.5 GHz. Protection from input overdrive beyond 0 dBm is provided as well as protection from various failure conditions including over-temperature and power supply faults.

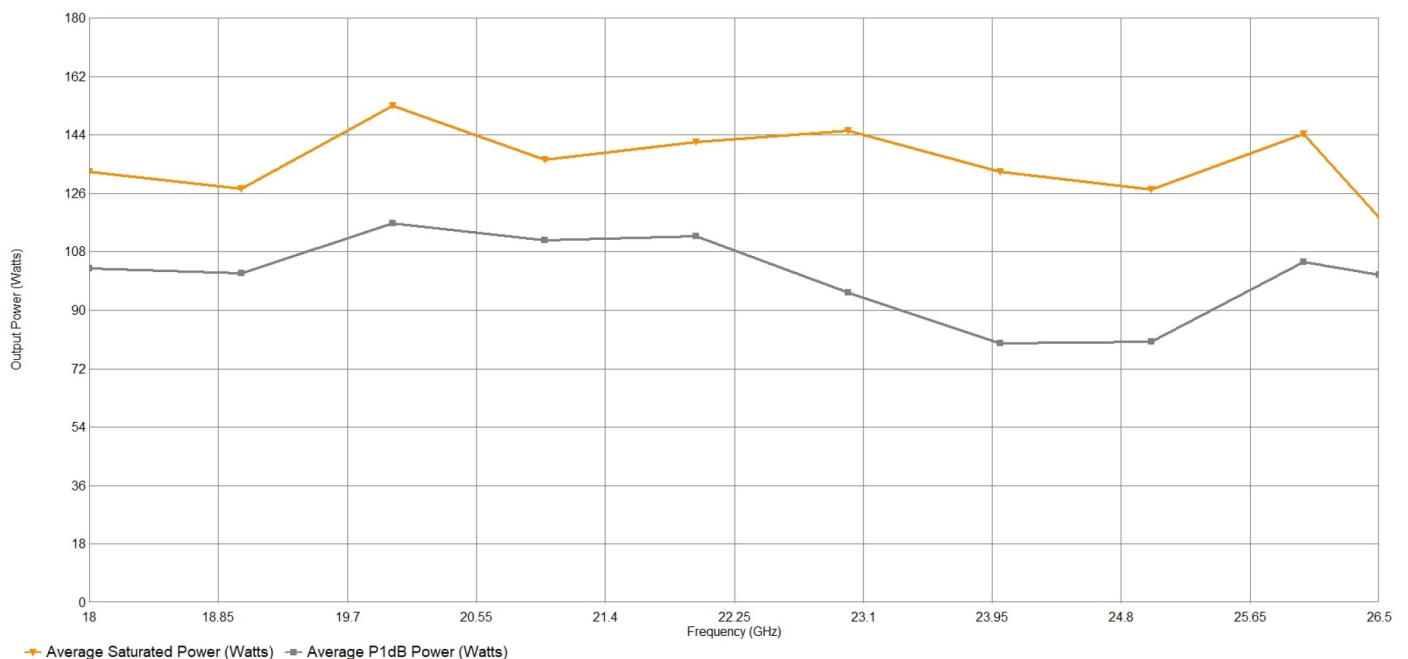
MAIN FEATURES

- **Class A/AB Linear**
- **Dual Directional Coupler**
- **100% Mismatch Tolerant**
- **Built In Web Server**
- **Ethernet & GPIB Remote Interface**
- **3 Year Warranty**
- **Applications: Radiated immunity (ISO, IEC, MIL), Telecom Component Test and Aerospace & Defence**

A front panel display indicates the operational status and fault conditions. All amplifier control functions, and status indications are available remotely using GPIB/IEEE-488, or Ethernet. Interface connectors are located on the back panel. Local and remote operation is managed by a switch on the front panel.

This is a multiple purpose amplifier. The low level of spurious signals and linearity make it ideal for, radiated immunity, (ISO, IEC & MIL) Aerospace & Defence, and Telecom Component Test applications.

The export classification for this equipment is 3A001. These commodities, technology or software are controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.



◆ Average Saturated Power (Watts) ■ Average P1dB Power (Watts)

Technical Specifications

Frequency Range	18 - 26.5 GHz
Rated Output Power	100W (min) - 110W (typ)
Power Output @ 1dB Compression	80W (typ)
Input for Rated Output	0dBm (1mW)
Small Signal Gain (Text)	50dB (min) 54dB (typ)
Gain Variation (max) ±	5.0 dB
Harmonics @ P1dB (min)	-20 dBc
Spurious (typ)	-60 dBc
Input VSWR	2:1 (typ)
Output Impedance	50 Ohm
Noise Figure (typ)	12 dBm
Modulation Formats	AM, FM, PM, ODFM
Maximum Input Power (no damage)	0 dBm
Output VSWR Tolerance	Infinite for no damage (100% mismatch tolerant) PN -0.5dB min at 2:1

General Specifications

Supply Frequency	47 to 63 (Hz)
Supply Voltage	200 to 240 VAC
Supply Power (max)	1.5 KVA

Mechanical Specifications

RF Input Connector	SMA - Female
RF Output Connector	WR42
RF Sample Port Connectors	SMA - Female
Dimensions (No Cabinet) (W x H x D)	(4U) 48.2 x 17.78 x 63.0 cm (19.0 x 7.0 x 24.8 Inch)
Weight (No Cabinet)	32 kg (70.54 lbs)
Cooling System	Forced air (self contained fans)
Com. Interface	IEEE-488 / Ethernet

Environmental Specifications

Ambient Running Temperature	0°C to +45°C
Storage Temperature	-25°C to +85°C
Maximum Altitude	up to 2000M
Shock and Vibration	MIL-STD-810 G

Regulatory Compliance (CE)

EMC	EN 61326-1
Safety	UL 61010-1
RoHS	DIRECTIVE 2011-65-EU
Export Classification	3A001

Available Configurations

Product	Configuration	Item #
AR18K26-100-001	Front Panel RF Connectors	10057012
AR18K26-100-002	Rear Panel RF Connectors	10057013