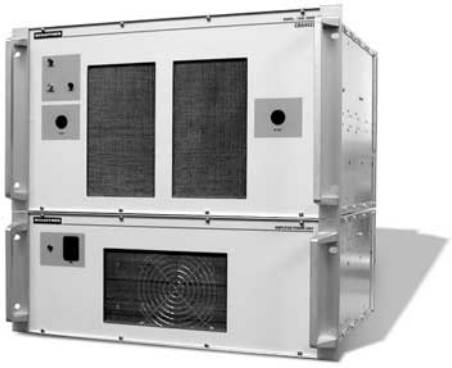
Power Amplifier 80 - 1000MHz 200W

CBA 9433

- **Reliable**
- **Tested and matched to EMC antennas**
- **Protected outputs for EMC test loads**

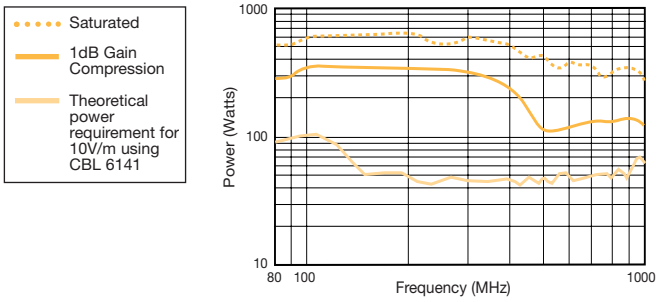


CBA 9428

Model CBA 9433 is a Solid-State amplifier capable of generating 200W minimum power over the 80-1000MHz frequency range. The gain performance has been deliberately slewed to be much higher at low frequencies to accommodate poor power transfers, normally found in radiated susceptibility testing, using conventional antennas. This Class A amplifier consists of a pre-amplifier driving four power modules via a divider and combiner. The unit is powered from a switched mode power supply for high efficiency, high power factor and universal line operation. The unit is air cooled with integral fans and is protected against faulty cooling by excess temperature sensing. A safety interlock connector is provided, which the user can short circuit to ground, to turn off the amplifier. Front panel indicators are provided to indicate over-temperature and RF interlock.
The amplifier is designed for rugged operation into a variety of loads, and will tolerate even an '∞ - 1' load VSWR.
The amplifier is primarily intended for use as a power source for EMC susceptibility testing but is also applicable to other systems requiring a wide-band linear amplifier.

The power requirement curve shown in fig.1 represents the theoretical power required to deliver 10V/m with 80% amplitude modulation at a distance of three metres from a CBL 6141 antenna. When any antenna is placed inside an anechoic chamber (which does not meet the criteria of free space) the performance is modified and so reasonable head room needs to be allowed in order to meet test requirements with confidence. This effect is most noticeable at the lower frequencies and so it is important to consider the power headroom at this point when defining a test system, Schaffner would be happy to advise on specific situations.

Typical Power Output



Technical Specifications		CBA 9433
Saturated output power		200W min
Linear power (<1dB gain comp)	80MHz - 300MHz	250W min
	300MHz - 1GHz	140W min
Gain		58dB min
Gain flatness		±2dB
Input return loss		10dB min
Output impedance		50Ω nominal
VSWR mis-match tolerance		∞ : 1 Abs. Max
Harmonics at rated power and 1dB gain compression		-20dBc
Input and output connectors		type N female
Power supply		184-264V ac, 45-66Hz, 2kW max
Temperature range		0 to +40˚C
Dimensions		Housed in two 19 inch racks, 6U for the amplifier, 4U for the power supply
Depth		500mm max
Weight		35kg max