RF AMPLIFIERS
BT-AlphaB-CW
100kHz-3MHz
50W, 100W

POWER AND PRECISION

The BT-Alpha series is a range of class AB RF power amplifiers available in a range of LF/MF bands

Excellent phase and amplitude stability.

High efficiency
High linearity

Available as stand alone amplifier systems or as plug-in modules for OEMs

Suitable for NMR, MRI, NQR, ultrasound systems and other scientific applications

Model number	BT00050-AlphaB-CW, BT00100-AlphaB-CW
Peak output power for 0dBm drive	50W, 100W CW minimum
Peak output power @ 1dB compression	40W, 70W CW minimum
Type	Class AB MOSFET
Frequency	100kHz – 3MHz
Gain	47dB, 50dB (±1.5dB)
Small signal gain flatness	±1.5dB max.
Intermodulation distortion 2-tones, 5W per tone, 100kHz spacing	+57dBm, +60dBm
Duty cycle	100%
Harmonics	<-25dBC
Spurious	<-60dBC
Output noise (blanked)	<10dB above thermal (1MHz bandwidth)
Noise figure	Approx.10dB
Phase change/power	5° max.change from -30dB to full power
Phase stability/time	<1° max.change in 24hrs
Input VSWR	2:1 max.
Input/output impedance	50Ω nominal



Protection	Overheating, load mismatch, drive faults, limited transient protection on inputs and outputs
Cooling	Forced air
Drive signals: RF drive RF gate (blanking)	 0dBm nominal, 10dBm for no damage 0-5V CMOS
Dimensions	19” x 640mm x270mm
Connectors	RF out: N type Inputs: BNC
Temperature	0ºC-40ºC
Humidity	95% non-condensing
Compliance	CE

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