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Wideband Solid State Power Amplifier
20-500 MHz 500W
MODEL BHED2758-500

Features:

- Wideband V/UHF Operation
- Single LRU with internal Power Supply
- Instantaneous bandwidth
- AB Linear HV LDMOS Technology
- High Output Power Dynamic Range
- Forward and Reverse Power Monitoring
- Thermal and Load VSWR Protection
- Digital Interface for Control & Status Monitoring
- Digital Automatic Leveling Control Loop
- Self-Protection and BIT
- Internal Dummy Load Switch

Performance Specifications

Frequency Range:	20 to 500 MHz
Output Power:	500W CW Typical
Power Gain:	57 dB Nominal
Dynamic Range:	10.5 dB (7 steps)
Modulation Control	AM/FM/SSB
Input/Output VSWR:	<2:1
Output Load VSWR	2:1 Turn down 0.5db Typ. 3:1 Turn down 2.0db Typ.
Noise Quieting	<50uS
Noise Power Output	-86 / -150 dBm/Hz
Input RF Overdrive	+8 dB Max
AM Distortion 85% 1kHz	10% Max
Harmonics:	
2Fo:	<-25dBc Typical
3Fo:	<-20dBc Typical
Spurious	<-60dBc Max.

AC Voltage Input:	180-264 VAC 47-63HZ 3 Phase
AC Power Consumption:	5KVA Max.
Operating Temperature:	0°C to +50°C Ambient
Operating Humidity:	0 to 95% non-condensing
Operating Altitude:	10,000 Ft.
Control Interface:	Ethernet /RS-422
RF Connectors:	
RF Input Port:	N Female
RF Output:	SC Female
RF Output to Dummy Load	SC Female
Interface Connectors:	*Sub D 28 Pin & RJ-45*
Size:	12.25 Inches (7U)
Weight:	120 lbs.
Packing & Shipping:	MIL-STD-810G Method 514.6 Annex C

COMTECH PST's latest innovation supports its customer's need for a VHF/UHF wideband high power RF amplifier in a single LRU. This class AB linear design operates over the full 20-500MHz frequency range and is ideal for use in research laboratories or where reliable & accurate linear power is required. The amplifier is robustly designed so that it can deliver exacting high power into high VSWR antenna loads, is electronically self-protected and supports multiple modulation schemes. Power accuracy is maintained through user controlled step attenuators and a fast 100uS digital ALC loop. The Front Panel Display supplements the operator's remote control features with full operational status with forward and reverse power reporting. Our designs are fault tolerant because of our multiple RF modules final stage combining techniques. Internal BIT helps troubleshoot to the faulty component. The single LRU also houses a SPDT Dummy Load Switch as well as an efficient modular AC power supply.