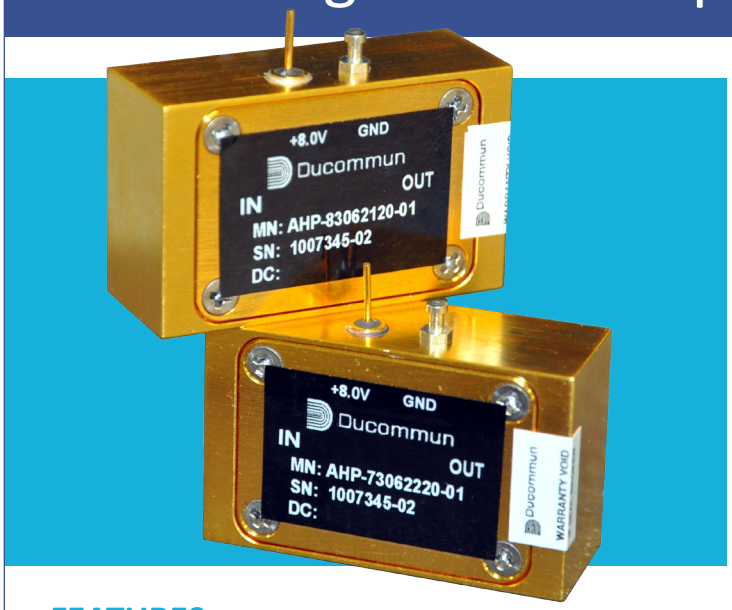
Ducommun LaBarge Technologies, Inc.
For more information, contact **our inside sales team** at
310.513.7200 or **RFSales@ducommun.com**
www.ducommun.com

Ducommun LaBarge Technologies
E Band High Power Amplifiers (71-76 & 81-86 GHz)



DESCRIPTION

Model AHP-73062220-01 and AHP-83062120-01 are millimeter-wave power amplifiers designed for use from 70.5 to 76.5 GHz and 80.5 to 86.5 GHz respectively. They provide small signal gain of 28 dB over those frequency ranges, with +20 dBm output power at 1-dB compression. Employing Monolithic-Microwave-Integrated-Circuit (MMIC) technology, the amplifiers operate from a single bias supply of +8 Vdc to +12 Vdc with an internal voltage regulator and bias sequencing circuitry, consuming about 700 mA of DC current. The amplifiers are idea for transmitters in E-band radio communication links.

FEATURES

- High output power and IP3
- Single power, compact and light weight
- Wide operational temperature range

APPLICATIONS

- Communication Transmitters
- Radar front
- Power block for multiplier chains
- Transceiver sub-assemblies

SPECIFICATIONS

Model Number:	AHP-73062220-01
Center Frequency:	73.5 GHz
Bandwidth:	± 3.0 GHz
Psat:	22 dBm (Typ)
P-1dB:	20 dBm (Typ)
Gain:	25 dB (Min) 28 dB (Typ)
VSWR:	2:1 (Typ)
V/I:	+8 to +12 V/700 mA (Typ)
RF Connectors:	WR-12 Waveguide with UG387/U Flange
Outline:	WT-A-5 (In-line WT-A-11 per request)

Model Number:	AHP-83062120-01
Center Frequency:	83.5 GHz
Bandwidth:	± 3.0 GHz
Psat:	21 dBm (Typ)
P-1dB:	19 dBm (Typ)
Gain:	25 dB (Min) 28 dB (Typ)
VSWR:	2:1 (Typ)
V/I:	+8 to +12 V/700 mA (Typ)
RF Connectors:	WR-12 Waveguide with UG387/U Flange
Outline:	WT-A-5 (In-line WT-A-11 per request)

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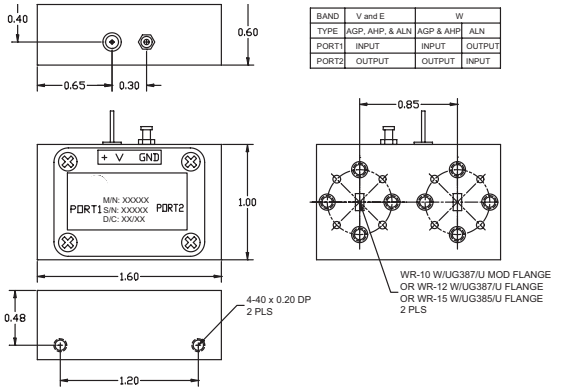
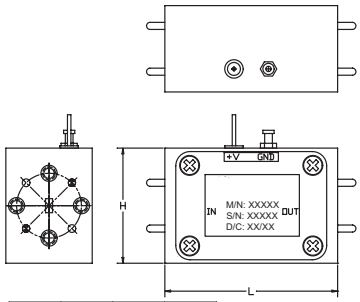
OUTLINE DRAWINGS



BAND	V and E	W	
TYPE	AGP, AHP, & ALN	AGP & AHP	ALN
PORT1	INPUT	INPUT	OUTPUT
PORT2	OUTPUT	OUTPUT	INPUT

Dimensions are in inches

WT-A-5

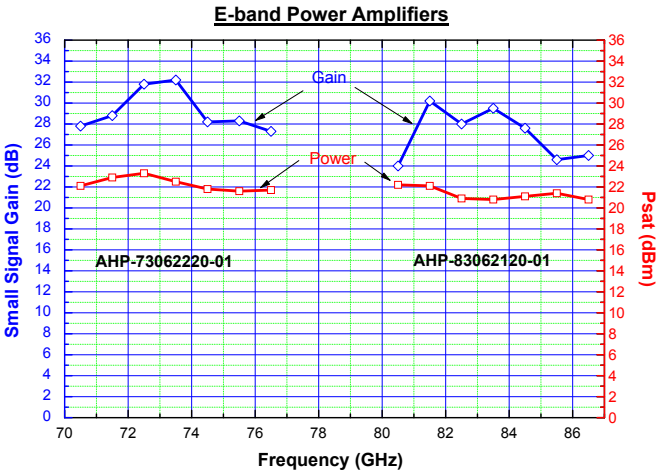


BAND	L	H	W
V,E, & W	1.50	1.00	0.75
Q & U	1.80	1.13	1.13

Dimensions are in inches

WT-A-11

PERFORMANCE CHARTS



Gain and Psat vs. Frequency

CUSTOM BUILT AMPLIFIERS

For additional information regarding Ducommun's High Power E-band Amplifier solutions, please provide the following specifications to our inside sales representatives:

Bandwidth:

Gain:

P1dB:

Psat:

VSWR:

All specifications are subject to change without notice. Please contact a sales representative for additional information.