

### Features:

- High dynamic range
- Modern future proof
- Small size for in building and tunnels
- Micro processor control and alarm MCAS
- Alarms are on Ethernet or contact closure
- Design blocks are universal to all of the family of tunnel amplifiers
- Amplifiers are broadband and filters determine the bands of operation
- Synergistic design for tunnel system provides similar blocks for coverage and Dynamic Range



Thirty years of custom designed In Building Wireless products is reflected in this high linearity, power efficient RF power amplifier. Merging of micro controller to the latest in RF products produces the AMDI's 1465PA. The 1465PA channel amplifier is a high-linearity, multi-carrier amplifier for DAS (Distributed Antenna System) applications. The unit is available in single and dual-amplifier configurations. Each amplifier has its own processor board, alarms, panel indicators and power supply. The processor board controls the enable signal to the amplifier and monitors forward power, reverse power, current, fan status and heat sink temperature. Front panel LEDs annunciate the state of the unit locally. Configuration for the UDA uses UL and DL in one module.

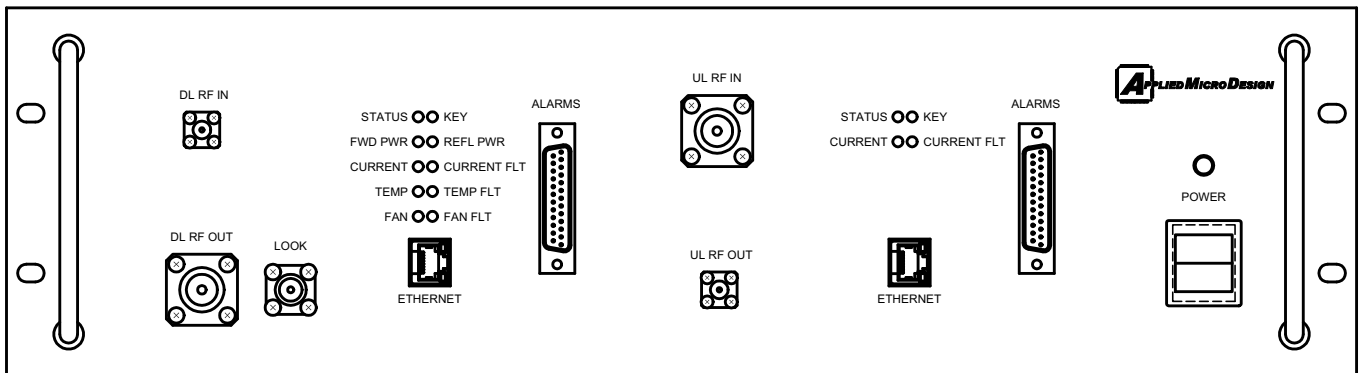
The processor board features remote monitoring capability via Ethernet. A computer running the Graphical User Interface (GUI) can display the status of the amplifier and provide control. GUI software is included with equipment.

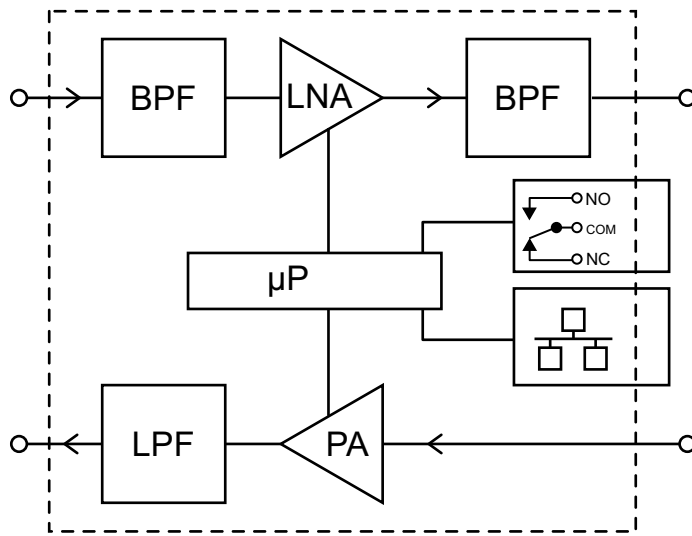
A front panel Look Port for each amplifier allows the user to sample the signal at the front panel. Look port enables measurement without interrupting main line communications. The Look Port sample is 40 dB below the main RF output port.

The processor board contains six NO/NC relay lines that interface to any alarm system and control: power amplifier temperature, current, LNA current, DC power, etc.



rev 1 2015





Model 1476UDAU Product Block Diagram



Model 1465DSP datasheet

		Fcenter	BW	Shape	NF	Sensitivity	# channels	Dynamic	Max Power	Power	Alarms	FCC
			1 dB	Factor			per window	Range	per Channel	28V		
Model	Base Model	(MHz)	(MHz)			(dBm)		(dB)	(dBm)	(A)		
No.												
	UDA-UL Remote											
1476UDAU-2	Band 2-	460.41	2	5	< 3 dB	-100	3	70	-40	0.1	see cut	TBP
1476UDAU-3	Band 3	483.31	3	5	< 3 dB	-100	5	70	-40	0.1	sheet	TBP
1476UDAU-4	Band 4	507.02	2	5	< 3 dB	-100	4	70	-40	0.1		TBP
1476UDAU-5	Band 5	859.03	4	5	< 3 dB	-100	8	70	-40	0.1		TBP
	UDA-DL Remote											
1476UDAU-2	Band 2	463.41	2	5	< 3 dB		3	70	20	1.5	see cut	TBP
1476UDAU-3	Band 3	486.31	3	5	< 3 dB		5	70	20	1.5	sheet	TBP
1476UDAU-4	Band 4	510.02	2	5	< 3 dB		4	70	20	1.5		TBP
1476UDAU-5	Band 5	814.03	4	5	< 3 dB		8	70	20	1.5		TBP

Configuration Chart

Specifications

Downlink

Frequency: Bands 2,3,4,5  
 Type: Linear Class A  
 Channels: 10 maximum  
 Power Output: 5 W (+37 dBm) Composite  
 Power Output: +20 dBm / carrier  
 Gain: 35 - 45 dB  
 Gain Adjust: 10 dB, Digitally controlled via GUI or locally  
 ALC: 5 Watts  
 OIP3: +55 dBm  
 Impedance: 50 Ohms  
 Load VSWR: Infinite, no damage  
 N.F.: < 3 dB  
 Power Supply: 115 V AC  
 Current: < 2A  
 Operating Temp: -30° to +60° C  
 Size: 19" x 5.22" x 16"

Uplink

Frequency: Bands 2, 3, 4, 5  
 NF: < 3 dB  
 Sensitivity: < -100 dBm  
 Bandwidth: see chart above  
 Power: < 0.1 amps on 12 vdc  
 Maximum Input no damage: + 10 dBm

