

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.

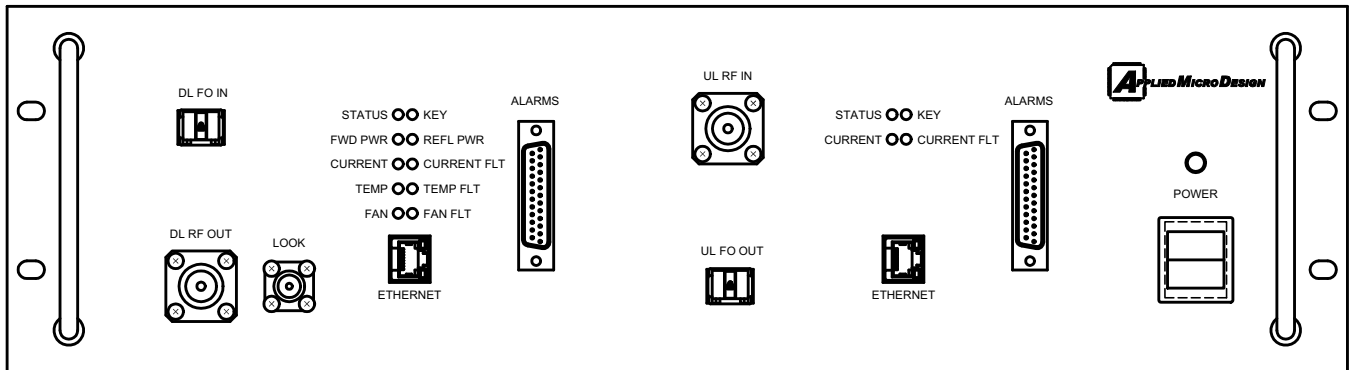
The processor board features remote monitoring capability via Ethernet. A computer running the Graphical User Interface (GUI) can display the status of the amplifier and provide control. GUI software is included with equipment.

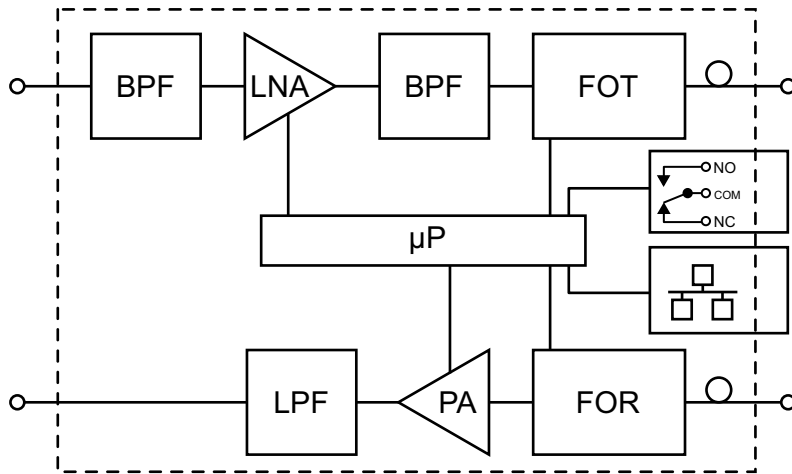
A front panel Look Port for each amplifier allows the user to sample the signal at the front panel. Look port enables measurement without interrupting main line communications. The Look Port sample is 40 dB below the main RF output port.

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.



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Model 1476FFRU Product Block Diagram



Model 1465DSP datasheet

	Model	Base Model	Fcenter	BW	Shape	NF	Sensitivity	# channels	Dynamic	Max Power	Power	Alarms	FCC
			(MHz)	1 dB (MHz)	Factor		(dBm)	per window	Range (dB)	per Channel (dBm)	28V (A)		
		F-UDA-UL Remote											
	1476FFRU-2	Band 2-	460.41	2	5	< 3 dB		3	70	-40	0.1	see cut	TBP
	1476FFRU-3	Band 3	483.31	3	5	< 3 dB		5	70	-40	0.1	sheet	TBP
	1476FFRU-4	Band 4	507.02	2	5	< 3 dB		4	70	-40	0.1		TBP
	1476FFRU-5	Band 5	859.03	4	5	< 3 dB		8	70	-40	0.1		TBP
		F-UDA-DL Remote											
	1476FFRU-2	Band 2	463.41	2	5	< 3 dB		3	70	20	1.5	see cut	TBP
	1476FFRU-3	Band 3	486.31	3	5	< 3 dB		5	70	20	1.5	sheet	TBP
	1476FFRU-4	Band 4	510.02	2	5	< 3 dB		4	70	20	1.5		TBP
	1476FFRU-5	Band 5	814.03	4	5	< 3 dB		8	70	20	1.5		TBP

Configuration Chart

Specifications

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"

Fiber Optic Specifications

Frequency Range: 50 kHz - 3 GHz
 Operating Mode: Supports Full-Duplex & simplex communications
 Channel Capacity: Base Unit (BU) 8 Full-Duplex or 8 Simplex Channels
 Gain: 17 dB typical
 Transmitter Output Power: > 1 mW optical
 Receiver Sensitivity: -21 dBm optical
 VSWR I/O: 2:1 maximum
 Output Noise Floor: -129 dBm (with 1 meter fiber, 2.5 GHz)
 Spur-Free Dynamic Range: > 102 dB
 Input 3rd Order Intercept: > 24 dBm
 RF Input to Xmt: +10 dBm maximum
 Max. Optical Input to Rcvr: < 4 mW
 Power Requirement (module): TX ± 12 V @ <50 mA; RX +12 V @ <150 mA
 Connectors: RF: SMA Female
 Optical: SC/APC
 Operating Temperature: -20 °C to +60 °C
 Storage Temperature: -50 °C to +85 °C
 Humidity: 90% non-condensing
 Weight: < 1 lb.
 Enclosure Size: 3/4" W x 3" L x 7/8" H
 Fiber Optic Cable Type: 9/125 µm Single-Mode
 Wavelength: 1310 / 1550 nm

