

# 2 WAY LINE AMPLIFIER 860 MHz

[BNA860-2-x/x-x-x/x-x] Cable Products, Amplifiers

## Description

Taikan's BNA860-2-x/x-x-x/x-x is a 860 MHz two-way, two output line amplifier. Its modular design allows integration of the thermal compensator, forward (downstream), and return (upstream) amplification in one water-resistant unit. This reliable, high performance amplifier provides a cost effective solution for optimization of HFC TV networks.

## Features

- Automatically Adjusts Gain (AGC function) According to the Output Level or Environmental Temperature
- Modular Design with Detachable Amplifier and Power Supply
- GaAs Double Power Amplifier Module Offers High Linearity and Fidelity
- Rugged Outdoor Aluminum Alloy Die-cast Housing Offers Excellent Water Resistance and Electromagnetic Shielding Performance
- Uses Two-way Amplifier to Transport TV and Data Signals
- Uses High Efficiency Wide Operating Range Switching Power Supply
- Diplex Filter Option Offers Various Band Splits



## Ordering Information

BNA860 - 2 - x / x - x - x / x - x

U: US Power Adapter 110V; E: Europe Power Adapter 220V  
 42/54 (5-42 / 54-1002); 65/85 (5-65 / 85-1002); 55/70 (5-55 / 70-1002); 85/105 (5-85 / 105-1002)  
 0 for Manual Gain Control; 1 for Automatic Gain Control  
 12, 18, 20 or 22 dB for Return (Upstream) Gain\*  
 23, 30, 34, or 36 dB Forward (Downstream) Gain\*

\*12 Return(Upstream) Gain Only Available with 23 Forward (Downstream) Gain  
 \*18 Return(Upstream) Gain Only Available with 34 Forward (Downstream) Gain  
 \*20 Return(Upstream) Gain Only Available with 36 Forward (Downstream) Gain  
 \*22 Return(Upstream) Gain Only Available with 30 Forward (Downstream) Gain

Model Number	Description	Box Weight	Dimensions (L x W x H)
BNA860-2-x/x-x-x/x-x	860 MHz 2 Port Line Amplifier	2.2 kg / 5 lbs	280 x 209 x 100 mm. (11.02 x 8.22 x 3.94 in.)

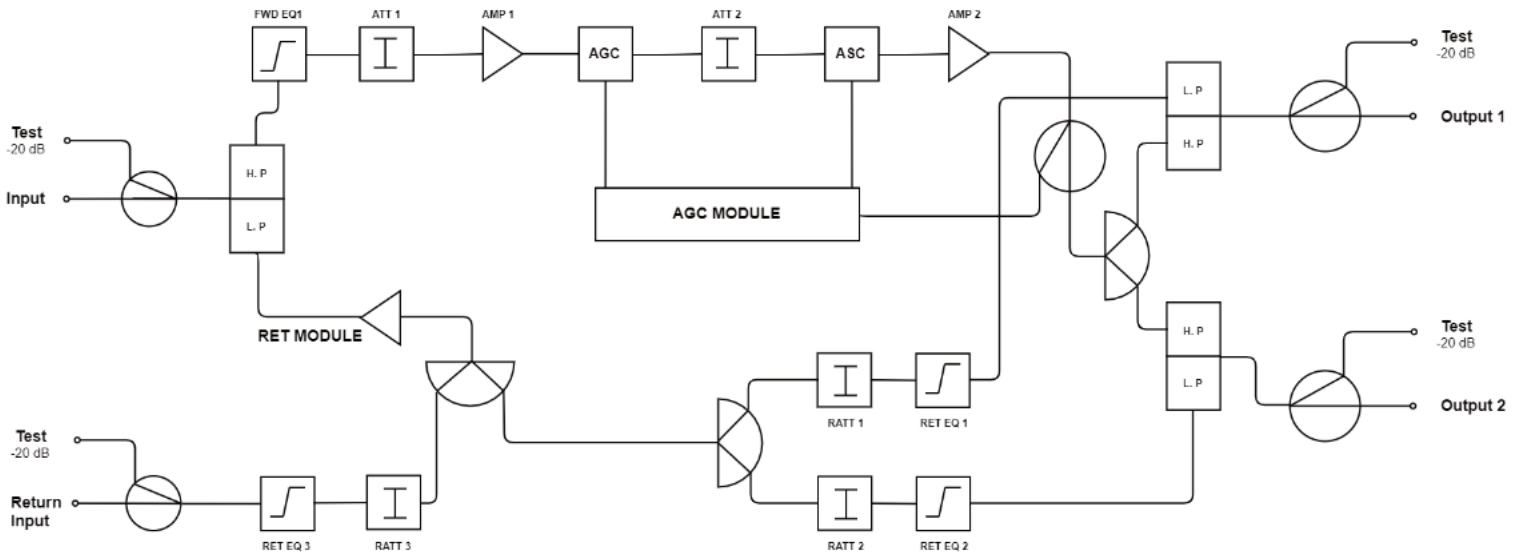
## Forward (Downstream) Specifications

Forward (Downstream) Bandwidth	54/70/85 - 860 MHz
Max Gain	23/30/34/36 dB
Flatness	± 0.75 dB
Return Loss	≥ 15 dB
Noise Frequency Ratio	≤ 10 dB
Output Level	102 dBμV
Distortion*	CTB: > 65 dB CSO: > 63 dB
Hum Modulation	≥ 62 dB
AGC Range (optional)	± 4 dB ± 0.3 dB
Thermal Compensator (optional)	3.5 dB
Compensator Range (0-60 °C)	
Power Supply	60 VAC (30V-70V / 1-0.5A) or 220 VAC (150V-265V / 0.3-0.2A)
Operating Temperature	-20 to +50 °C (-4 to +122 °F)

## Return (Upstream) Specifications

Return (Upstream) Bandwidth	5 - 42/55/65 MHz
Gain	12/18/20/22 dB
Flatness	± 0.75 dB
Return Loss	≥ 15 dB
Noise Frequency Ratio	≤ 8 dB

Functional Block Diagram



\* With AGC Module

\* 59 Tv channels loading & 200 MHz digital signal. Output level is 105 dBμV (flat) with tilt of 6 dB

# 2 WAY LINE AMPLIFIER 1 GHz [BNA1000-2-34/18-x-x/x-x]

Cable Products, Amplifiers



## Description

Taikan's BNA1000-2-34/18-x-x/x-x is a 1 GHz two-way, two output line amplifier. Its modular design allows integration of forward (downstream), and return (upstream) amplification in one water-resistant unit. This reliable, high performance amplifier provides a cost effective solution for optimization of HFC TV networks.



## Features

- Automatically Adjusts Gain (AGC function) According to the Output Level or Environmental Temperature
- Unitized Design with Detachable Amplifier and Power Supply all in one Module
- Two 108 dBuV Output Ports, Each with a Built-in Attenuator
- 1 GHz Frequency Amplifier Platform with SMT Technology
- 1 GHz GaAs Double Power Amplifier Module Offers High Linearity and Fidelity
- Local and Remote Power Feeding Capability
- Rugged Outdoor Aluminum Alloy Die-cast Housing Offers Excellent Water Resistance and Electromagnetic Shielding Performance
- Transistor Surge Arrester Resists Lightning and Surge Voltages
- Diplex Filter Option Offers Various Band Splits



## Ordering Information

BNA1000-2-34/18 - **x** - **x/x** - **x**  
U: US Power Adapter 110V; E: Europe Power Adapter 220V  
42/54 (5-42 / 54-1002); 65/85 (5-65 / 85-1002); 55/70 (5-55 / 70-1002); 85/105 (5-85 / 105-1002)  
0 for Manual Gain Control; 1 for Automatic Gain Control

Model Number	Description	Box Weight	Dimensions (L x W x H)
BNA1000-2-34/18-x-x/x-x	1000 MHz 2 Port Line Amplifier	2.2 kg / 5 lbs	240 x 215 x 115 mm. (9.5 x 8.5 x 4.5 in.)

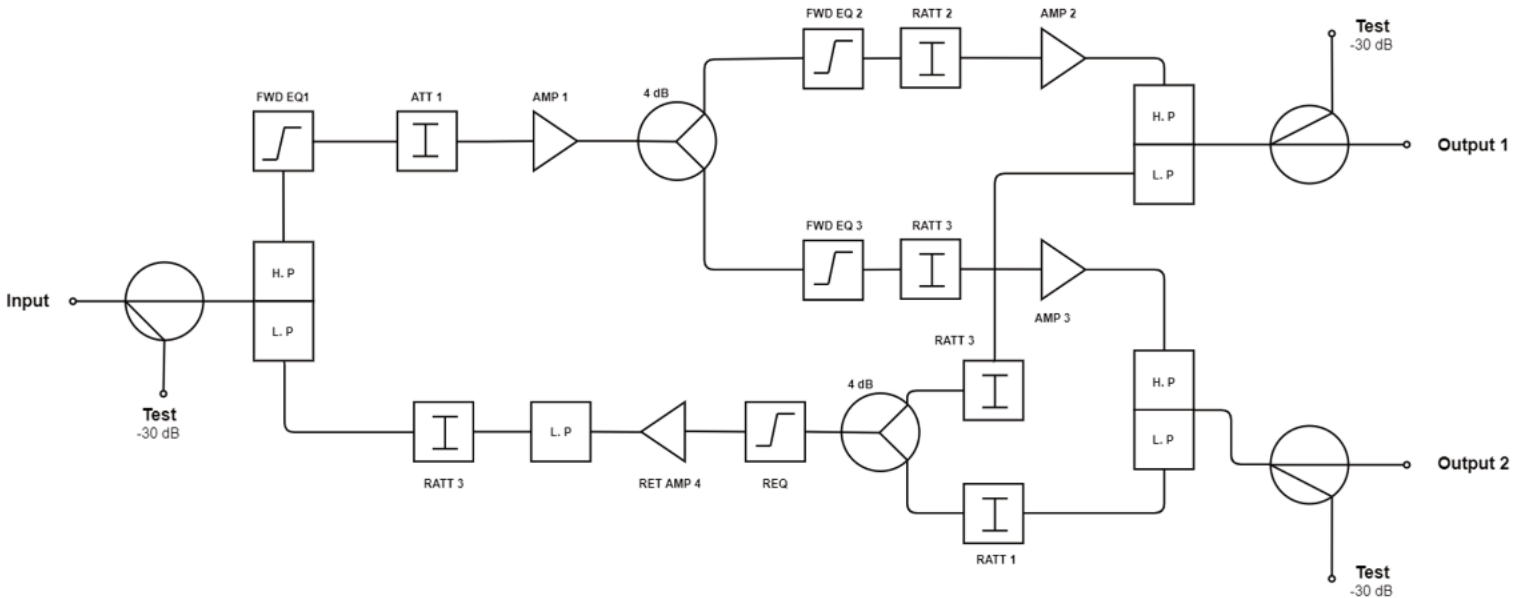
## Forward (Downstream) Specifications

<b>Forward (Downstream) Bandwidth</b>	54/70/85 - 1000 MHz
<b>Max Gain</b>	34 dB
<b>Flatness</b>	± 0.75 dB
<b>Return Loss</b>	≥ 16 dB
<b>Noise Frequency Ratio</b>	≤ 10 dB
<b>Output Level Range</b>	108 dBμV
<b>Distortion*</b>	CTB: > 75 dB CSO: > 70 dB
<b>Hum Modulation</b>	≥ 62 dB
<b>AGC Range (optional)</b>	± 4 dB ± 0.3 dB
<b>Power Supply</b>	60 VAC (30V-70V / 1-0.5A) or 220 VAC (150V-265V / 0.3-0.2A)
<b>Operating Temperature</b>	-20 to +50 °C (-4 to +122 °F)

## Return (Upstream) Specifications

<b>Return(Upstream) Bandwidth</b>	5 - 42/55/65 MHz
<b>Gain</b>	18 dB
<b>Flatness</b>	± 0.75 dB
<b>Return Loss</b>	≥ 16 dB
<b>Noise Frequency Ratio</b>	≤ 8 dB
<b>Diplex Filter (Option)</b>	42/54,65/85 MHz

Functional Block Diagram



\*Without AGC Module

\* 59 Tv channels loading & 200 MHz digital signal. Output level is 105 dBμV (flat) with tilt of 6 dB