

PDA1240 HOME DISTRIBUTION AMPLIFIER



- Downstream frequency range up to 1218 MHz
- Upstream frequency range up to 204 MHz
- Cost-effective solution
- Easy alignment by built-in jumper switches

GENERAL DESCRIPTION

The PDA home distribution amplifiers are designed for use in multiple dwelling units. Using in coaxial networks with data service is supported by either active or passive return path stages. The needed output level can be precisely set by jumpers. The long life cycle of the device is guaranted by the generously dimensioned power supply, which shows the presence of the powering voltage by a green LED. The housing conforms to the IP65 protection class.

TECHNICAL SPECIFICATIONS

Forward path RF parameters

Amplifier type	MMIC
Gain [dB]	30 or 40 (switchable)
Frequency range [MHz]	85...1218, 258...1218
Equaliser breakpoint frequency [MHz]	1218
Input RF attenuator range [dB]	0...16 ⁽¹⁾
Input RF equaliser range [dB]	0...16 ⁽¹⁾
Interstage RF attenuator range [dB]	0 / 6 ⁽²⁾
Interstage RF equaliser range [dB]	0 / 6 ⁽²⁾
Flatness [dB]	±1.0
Return loss (40MHz -1.5dB/octave) [dB]	>18
RF testpoint attenuation [dB]	20±1
Output level at 112 SC-QAM channels with 12 dB tilt and PreBER<10 ⁻⁹ [dBμV]	110
CTB [dB]	-66 ⁽³⁾
CSO [dB]	-65 ⁽³⁾
CXM [dB]	-65 ⁽³⁾
Noise-to-power ratio (NPR) maximum / Dynamic range of NPR > 42 [dB]	54 / 20 ^{(4) (5)}
Noise Figure [dB]	<7

Specifications are subject to change without notice!

Reverse path parameters

Gain [dB]	30
Frequency range [MHz]	5...65, 5...204
Diplex filter [MHz]	65/85, 204/258
RF attenuator range [dB]	0...16 ⁽¹⁾
RF equaliser range [dB]	0...16 ⁽¹⁾
Flatness [dB]	±1.0
Input return loss (40MHz -1.5dB/octave) [dB]	>18
RF testpoint attenuation [dB]	20±1
Out. level at 24 SC-QAM ch. with flat tilt and PreBER<10 ⁻⁹ , EN 60728-3[dBμV]	102
Noise-to-power ratio (NPR) maximum / Dynamic range of NPR > 36 [dB]	60 / 34 ⁽⁶⁾ ⁽⁷⁾
Noise Figure [dB]	<6

General parameters

RF connector	„F“
Power supply voltage [VAC]	230±20%
Maximum power consumption [W]	12
Hum modulation [dB]	70
Screening factor [dB]	80
Degree of protection	IP63
Temperature range [°C]	-20...+60
Dimensions [mm]	240x105x60
Weight [kg]	1.2

(1) Adjustable in 2 dB steps

(2) Switchable between the listed values

(3) 44 dBmV at 1218 MHz, flat tilt, 99 analog channels

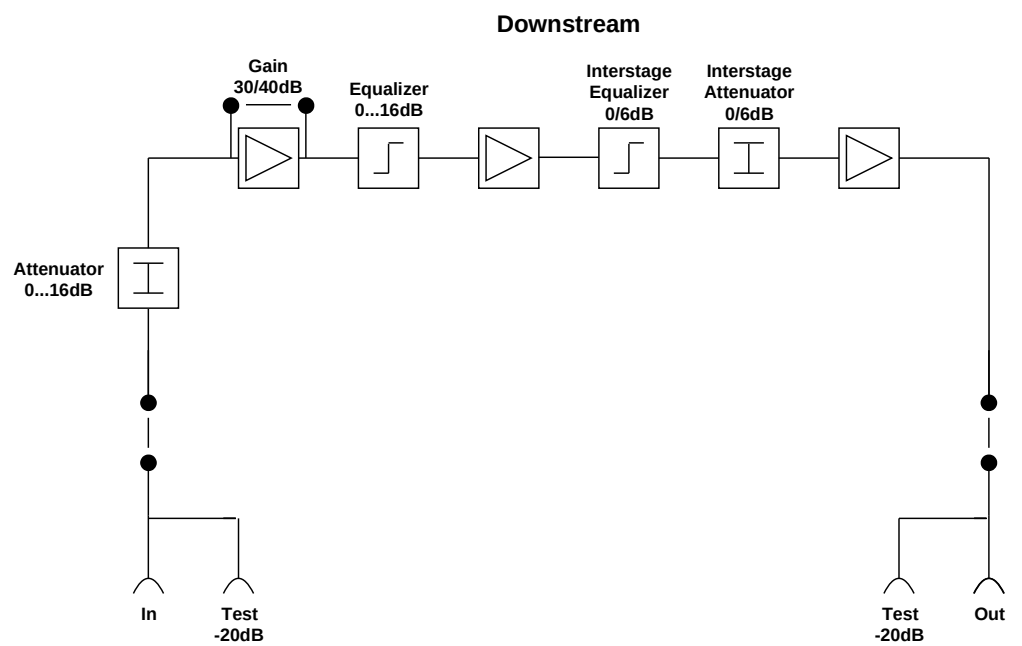
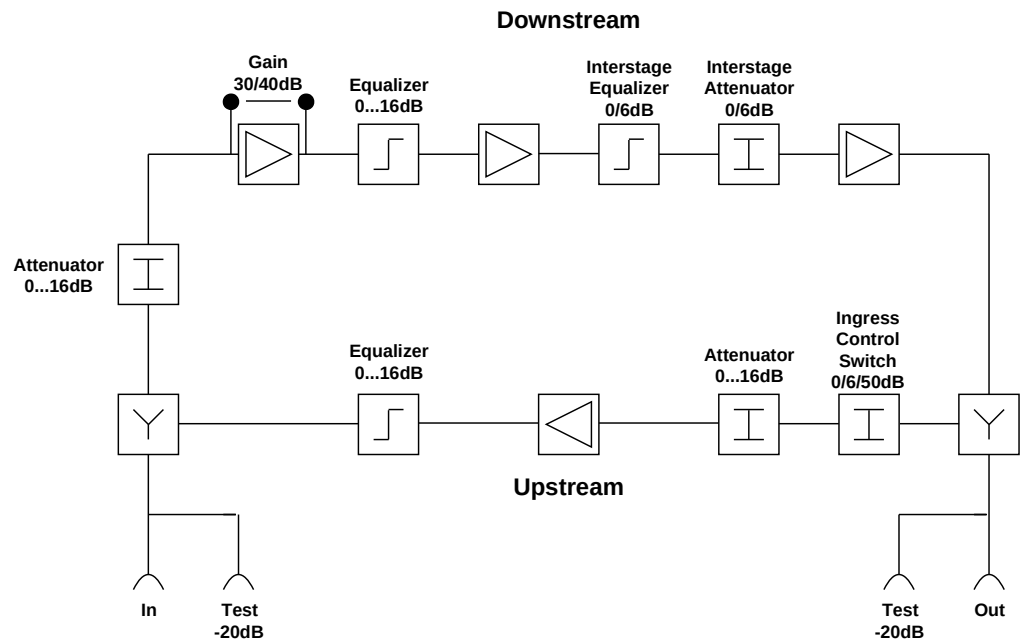
(4) Measured with flat full spectrum load between 85 and 1218 MHz

(5) NPR max at TCP = 60 dBmV

(6) Measured with flat full spectrum load between 5 and 204 MHz

(7) NPR max at TCP = 53 dBmV

BLOCK DIAGRAM



Specifications are subject to change without notice!

ORDERING INFORMATION _____

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Type of the diplex filter	
00	Without reverse path
65	Built-in 65/85MHz diplex filter
204	Built-in 204/258MHz diplex filter

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