

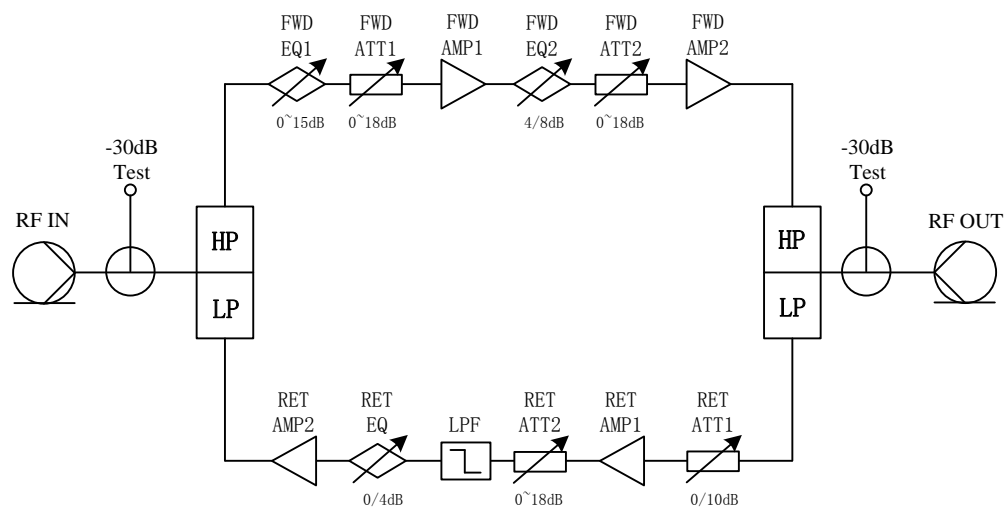
## YTF115H Series Bidirectional RF Amplifier



YTF series bi-directional amplifier is designed according to 1218MHz bandwidth. It can be used in HFC network as extender, distribution, user amplifier, or EOC amplifier.

- High output level, low distortion
- Gain and slope manually adjustable by plug type
- GaAs amplifier or push-pull amplifier optional

### Block diagram



Item	Unit	Parameters	
<b>Forward Path</b>			
Frequency range	MHz	110-1218	
Minimum gain	dB	≥32	
Rated input level	dBuV	72-74	
Rated output level	dBuV	108	
Gain flatness	dB	±1	
Input Attenuator	dB	0-min.18dB (step max.2dB)	
Input Equalizer	dB	0-min.15dB (step max.2dB)	
Interstage attenuator	dB	0-min.18dB (step max.2dB)	
Interstage equalizer	dB	4 and 8dB.(110-1218Mhz)	
Noise figure	dB	<7.5	
Return loss	Rfin	dB	14 (The limiting curve is defined at 110 MHz -1.5 dB /octave, at least 10)
	Rfout	dB	
Test port flatness	Rfin	dB	±1.0
	Rfout	dB	±1.0
CNR	dB	52	CENELEC 41 channel RF input level: 75dBuV flat Gain: 32dB. Interstage EQ:8dB.
C/CSO	dB	60	
C/CTB	dB	60	
MER	dB	40	Full Digital Load 254-1218MHz QAM256 RF input level: 75dBuV flat Gain: 28dB. interstage EQ: 8dB
BER		e-9	
<b>Return Path</b>			
Frequency range	MHz	5-85	
Gain	dB	≥24	
Gain flatness	dB	≤±1	
INPUT Attenuator	dB	0/10 dB	
Interstage attenuator	dB	0-min.18dB (step max.2dB)	
Interstage equalizer	dB	0/4 dB	
Noise figure	dB	<6.0	
Return loss	Rfin	dB	≥16
	Rfout	dB	≥16
Test port flatness	Rfin	dB	±1.0
	Rfout	dB	±1.0
Dynamic Range	dB	≥30 dB @36 dB CNIR	

General Performance		
Connector		F, inch, female
Impedance	$\Omega$	75
Voltage Range	VAC	90~264
Power Consumption	W	$\leq 6$
EMC		EN 50083/2 table 10 ClassA /IEC 60728 2012 Class A
Surge protection		4 kV (1.2/50us)
Protection class		IP41
Dimensions	mm	200(L) $\times$ 115(W) $\times$ 55(H)
Operating Temperature	$^{\circ}\text{C}$	-20~+55