

UPSTREAM NOISE BLOCKER

Patent P.

MODEL IGDA0000TE /TA /MA

**Ultra-high speed
Broadband network**

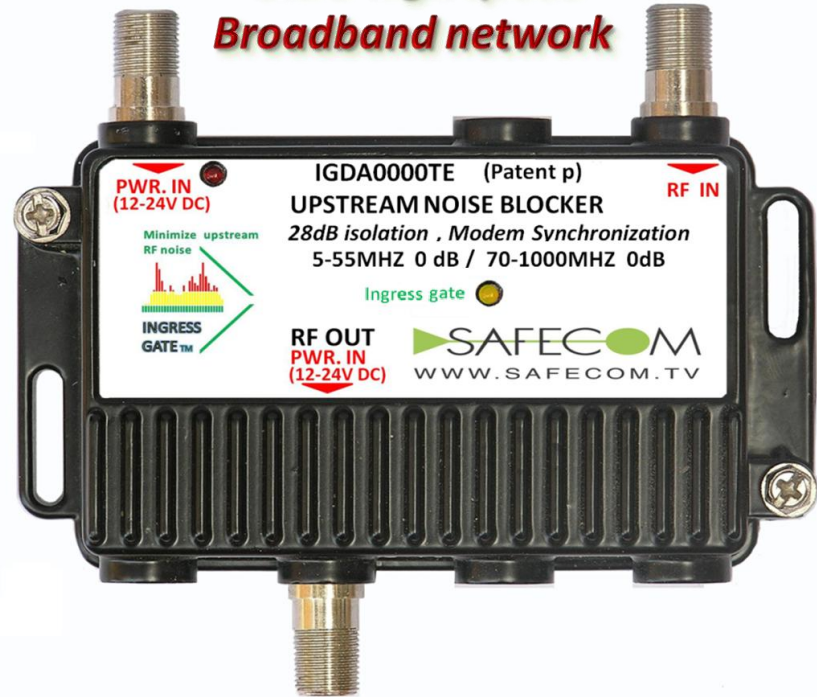
"Clean up" the upstream band to enlarge the spectrum for ultra high speed internet.

Ingress gate technology is the quicker, low cost and most effective tools to eliminate upstream noise disruptive the IP service at CATV network.

"BLOCK UPSTREAM INGRESS & RF NOISE by > 28 dB.

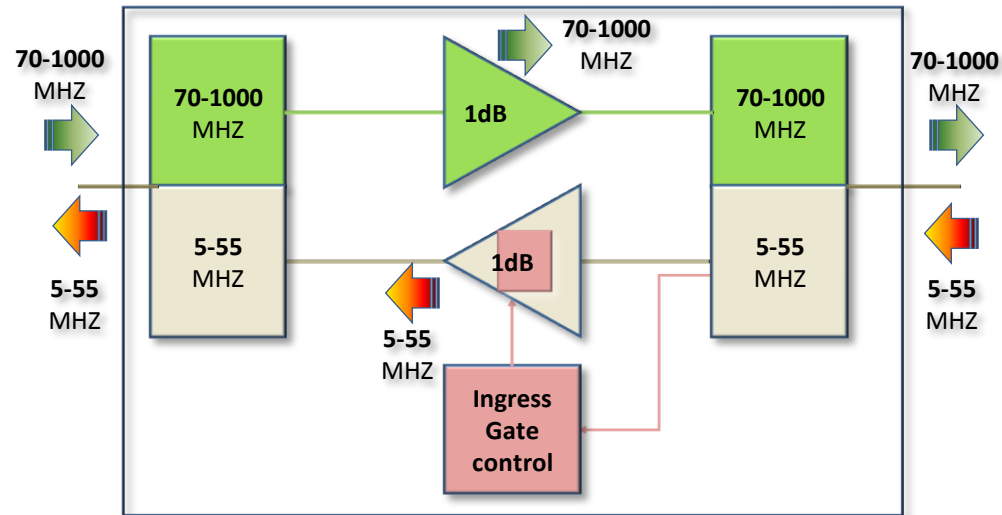
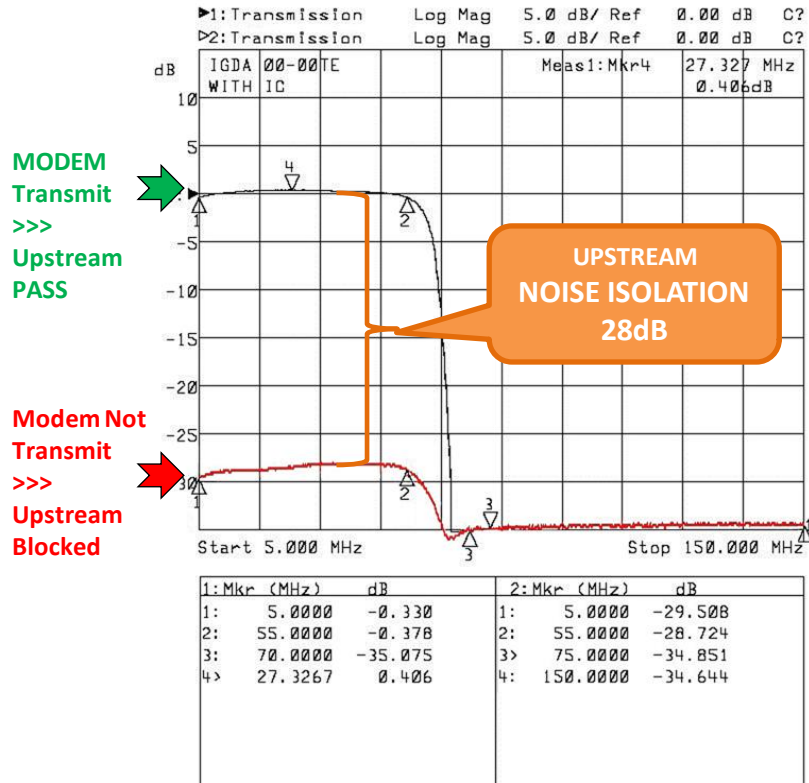
Enables Higher Data Rates on DOCSIS(R) 3.0 Networks.

Upstream gateway that allows carrier signals from customer premises into the network only when the home devices are actively transmitting.



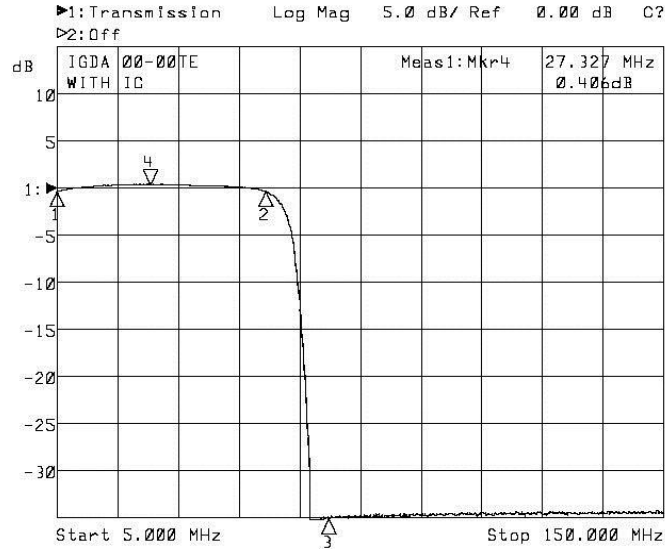
UPSTREAM NOISE BLOCKER

MODEL IGDA0000TE 5-55MHZ / 70-1000MHZ



MODEL IGDA0000TE 5-55MHZ / 70-1000MHZ
 MODEL IGDA0000TA 5-42MHZ / 55-1000MHZ
 MODEL IGDA0000MA 5-65MHZ / 80-1000MHZ

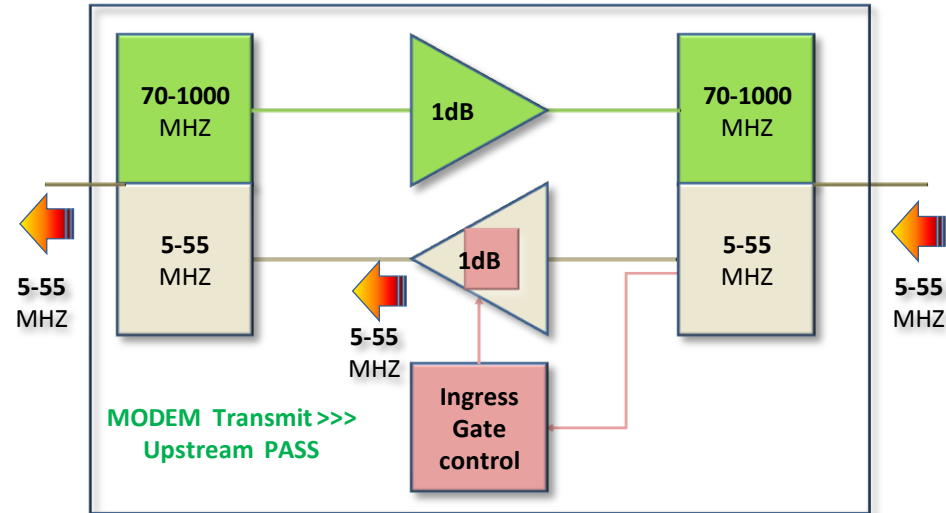
UPSTREAM TRANSMISSION PASS 5-150MHZ



1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1: 5.0000	-0.330		
2: 55.0000	-0.378		
3: 70.0000	-35.075		
4: 27.3267	0.406		

MODEM
Transmit
>>>
Upstream
PASS

UPSTREAM TRANSMISSION PASS -0dB

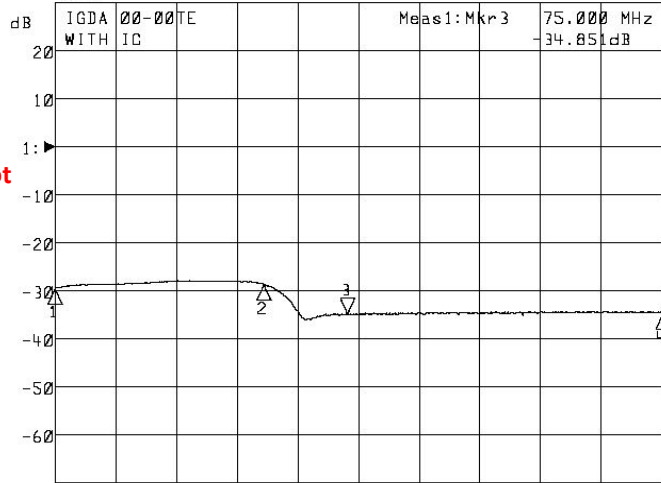


MODEL IGDA0000TE 5-55MHz / 70-1000MHz
 MODEL IGDA0000TA 5-42MHz / 55-1000MHz
 MODEL IGDA0000MA 5-65MHz / 80-1000MHz

UPSTREAM TRANSMISSION OFF

5-150MHZ - Noise blocked

►1: Transmission Log Mag 10.0 dB/ Ref 0.00 dB C?
►2: Off

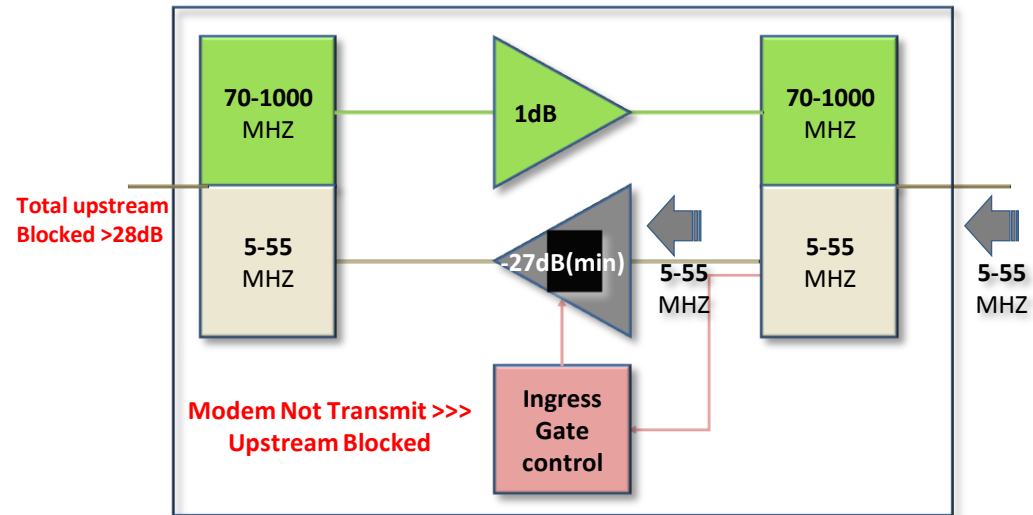


Start 5.000 MHz Stop 150.000 MHz

1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1: 5.0000	-29.508		
2: 55.0000	-28.724		
3: 75.0000	-34.851		
4: 150.0000	-34.644		

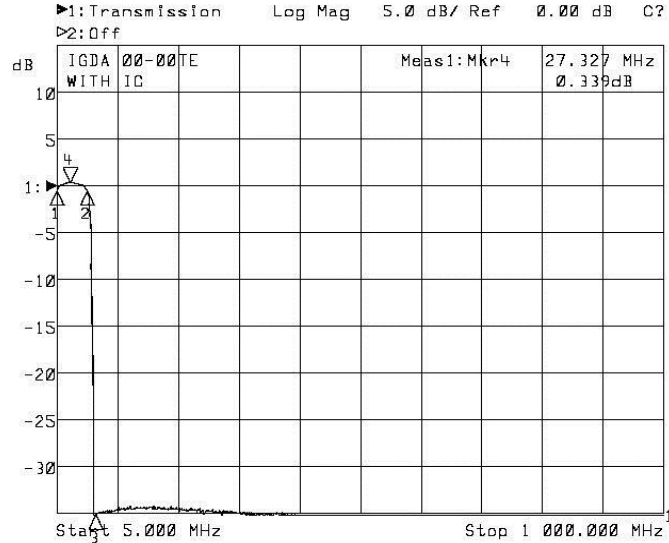
**Modem Not Transmit
>>>
Upstream Blocked**

UPSTREAM NOISE BLOCKED-28dB



- MODEL IGDA0000TE 5-55MHz / 70-1000MHz
- MODEL IGDA0000TA 5-42MHz / 55-1000MHz
- MODEL IGDA0000MA 5-65MHz / 80-1000MHz

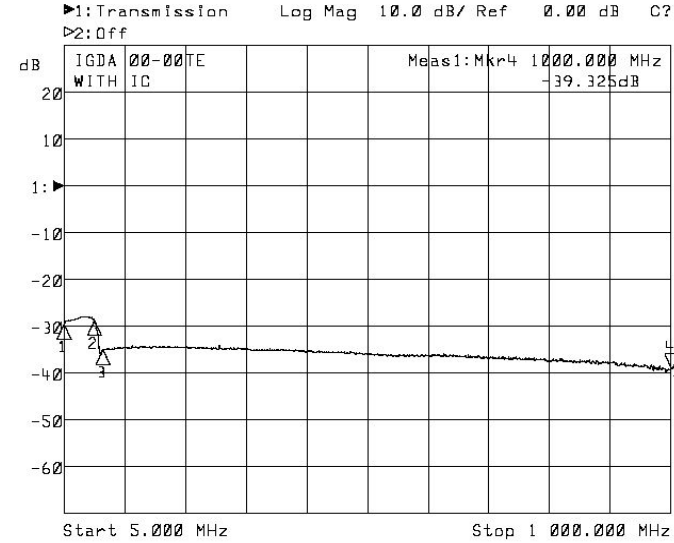
UPSTREAM TRANSMISSION "ON" 5-1000MHZ



MODEM
Transmit
>>>
Upstream
PASS

1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1: 5.0000	-0.550		
2: 55.0000	-0.497		
3: 70.0000	-35.065		
4> 27.3267	0.339		

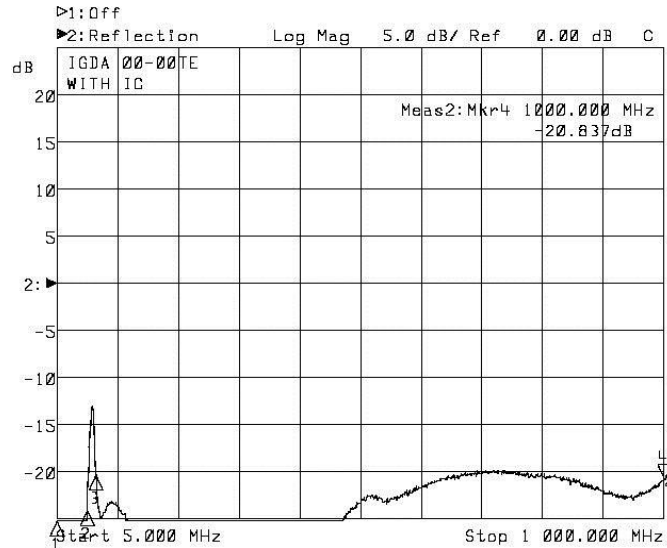
UPSTREAM TRANSMISSION "OFF" 5-1000MHZ



Modem Not
Transmit
>>>
Upstream
Blocked

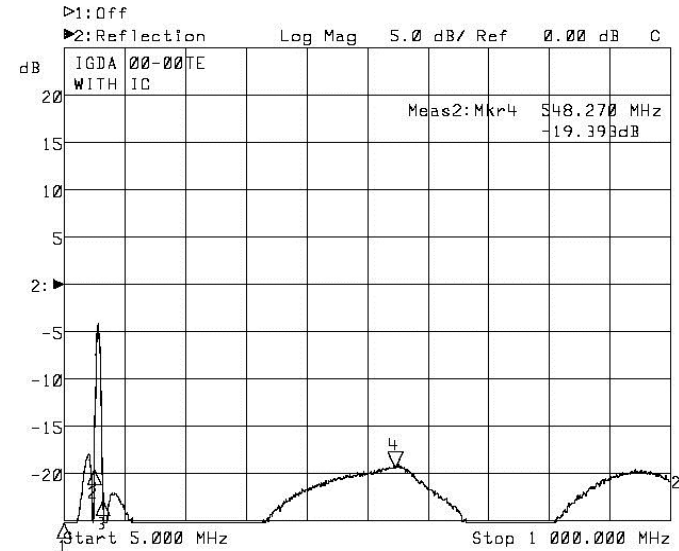
1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1: 5.0000	-29.558		
2: 55.0000	-28.695		
3: 70.0000	-35.011		
4> 1000.0000	-39.325		

RETURN LOSS RF-OUT 5-1000MHZ



1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1:	5.0000	-34.354	
2:	55.0000	-24.170	
3:	70.0000	-20.403	
4:	1000.0000	-20.837	

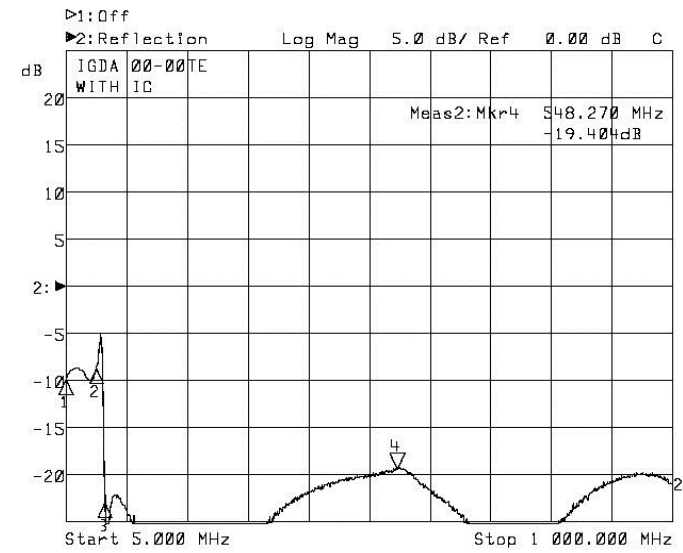
RETURN LOSS RF-IN UPSTREAM ACTIVE



1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1:	5.0000	-32.079	
2:	55.0000	-19.682	
3:	70.0000	-22.861	
4:	548.2700	-19.393	

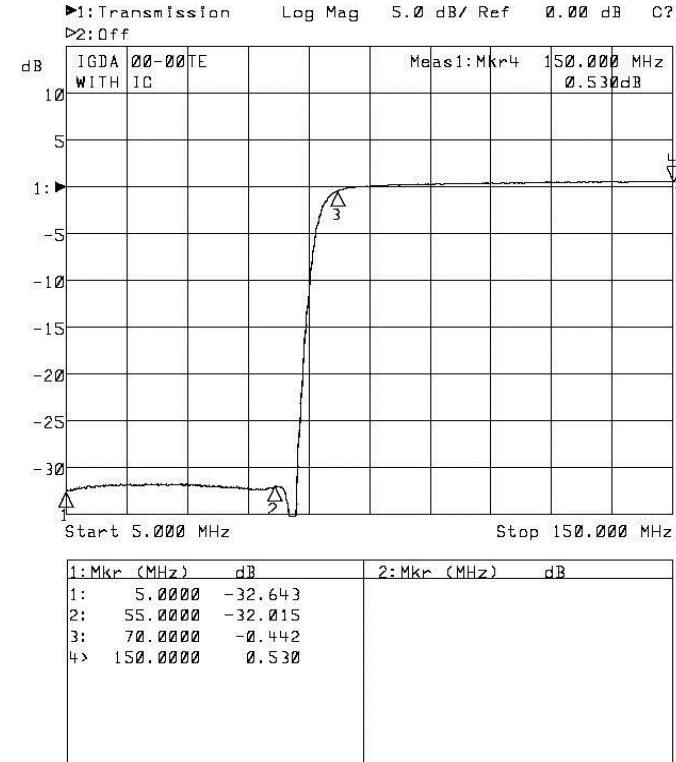
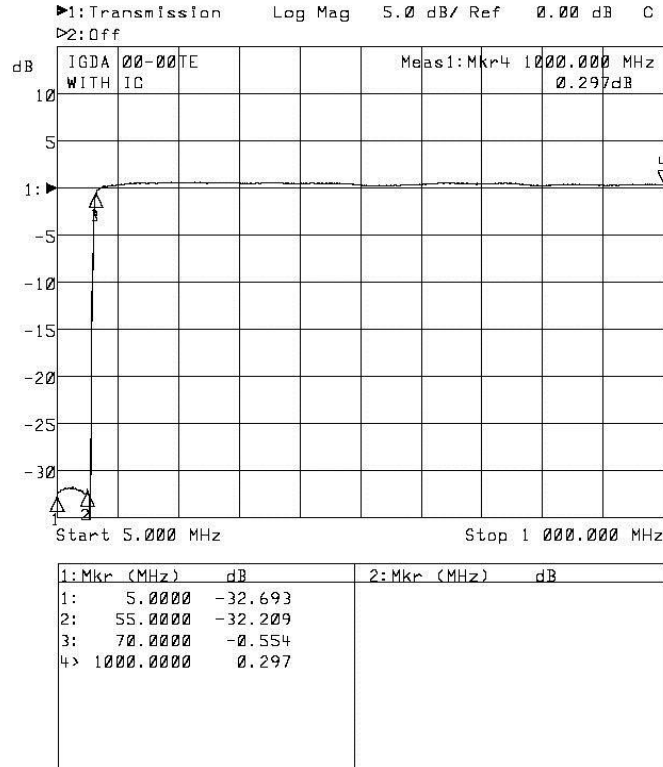
Return Loss RF-IN UPSTREAM -OFF

**Modem Not
Transmit
>>>
Upstream
Blocked**



1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
		1:	5.0000 -9.911
		2:	55.0000 -8.804
		3:	70.0000 -22.979
		4:	548.2700 -19.404

DOWNSTREAM TRANSMISSION PASS -0dB



UPSTREAM NOISE BLOCKER Model IGDA0000TE

Specifications

Parameter	Unit	Min value	Typic value	Max value
Forward (Downstream) path				
Frequency range	MHz	70		1000
Gain	dB	0	0	
Flatness	dB		±0.75	±1.0
Return loss	dB	16	18	
Output level ¹	dBmV	25		
Noise figure	dB		3.5	4
Group delay	Channel 2	ns		25
	Channel 3	ns		10
	After CH5	ns		5
CTB ¹	dBc			73-
CSO ¹	dBc			62-
Xmod ¹	dBc			70-
HUM	dBc			70-
Reverse (Upstream) path				
Frequency range	MHz	5		55
Upstream Noise Isolation			>28	
Gain	dB		0	
Flatness	dB		±0.5	±0.75
Return loss	Upstream "ON"	dB	16	>18
	Upstream "OFF"			
Noise figure MODEM Active	dB		6.5	7
Group delay	5-42MHz	ns		20
	10-36MHz	ns		5
2 nd Inter modulation ²	dBc			60-
3 rd Inter modulation ²	dBc			57-
Threshold level ³	dBuV		75±1	
Operating time	ns		1000	
INGRESS GATE Display			LED ON when upstream ON	

1. Input flat 10dBmV, 77 channels/6MHz
2. Input 2 un modulated series carriers @ 27, 33MHz, out level 58dBmV.
3. One un-modulation carrier wave.

General performance					
Impedance		Ohm	75		
RF to Power isolation		dB	>50		
RFI shielding		dB	>100		
Surge withstand			IEEE C62.41 Category A3 6kV/200A , 0.5μV-100kHz Ring wave		
Waterproof		Kg/cm ²	1		
Power supply voltage		VDC	10-15DC		
current (12VDC)	Upstream "ON"	mA		250	
	Upstream "OFF"			130	
F port conductor			360°pin structure push & pull force ≥ 100g,gold plated.		
Measurement		mm	110 x100 x 30		
Weight		g	165		