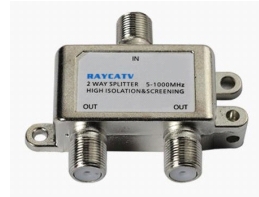


## IT-3800

### Indoor Tap

### Application

- ▶ HFC network



### Features

- ▶ Low insertion loss.
- ▶ High Isolation and return loss.
- ▶ Double flush mounting tabs for easy installation.
- ▶ Zinc housing that is plated of corrosion resistance.
- ▶ Available in 2,3,4,6,8 way splitter.

## Datasheet

### 1-way Tap

Parameter	Frequency Range			Unit	Index							
	Normal				06	08	10	12	14	16	18	20
Tap Loss	Typical (Permissible Deviation)	5MHz	±0.7	dB	6.2	7.5	9.5	11.8	13.6	15.8	17.8	19.5
		50MHz	±0.7	dB	6.5	7.8	9.8	12.0	13.8	15.8	18.0	19.8
		550MHz	±0.7	dB	6.7	8.0	10.2	12.2	13.9	15.9	18.2	20.2
		750MHz	±1.5	dB	6.9	8.2	10.4	12.4	14.0	16.4	18.4	20.4
		1000MHz	±1.5	dB	7.0	8.5	10.5	12.5	14.5	16.5	18.5	20.5
Insertion Loss	5MHz			dB	≤2.6	≤2.3	≤1.5	≤1.2	≤1.1	≤0.8	≤0.7	≤0.7
	50MHz			dB	≤2.6	≤2.4	≤1.4	≤1.2	≤1.0	≤0.7	≤0.6	≤0.6
	550MHz			dB	≤2.6	≤2.5	≤1.4	≤1.2	≤0.9	≤0.7	≤0.6	≤0.6
	750MHz			dB	≤3.0	≤2.6	≤1.5	≤1.2	≤1.0	≤0.7	≤0.7	≤0.7
	1000MHz			dB	≤3.3	≤2.8	≤1.8	≤1.6	≤1.0	≤0.9	≤0.9	≤0.9
Reverse Isolation	5-50MHz			dB	≥23	≥25	≥26	≥30	≥32	≥35	≥38	≥38
	50-550MHz			dB	≥24	≥24	≥25	≥28	≥28	≥30	≥31	≥31
	550-750MHz			dB	≥22	≥22	≥24	≥26	≥26	≥28	≥28	≥28
	750-1000MHz			dB	≥20	≥22	≥23	≥24	≥24	≥26	≥26	≥27
Return Loss	5-50MHz			dB	≥18	≥20	≥20	≥22	≥22	≥22	≥22	≥22
	50-550MHz			dB	≥20	≥20	≥20	≥20	≥20	≥20	≥20	≥20
	550-750MHz			dB	≥16	≥17	≥17	≥17	≥17	≥17	≥17	≥17
	750-1000MHz			dB	≥16	≥16	≥16	≥16	≥16	≥16	≥16	≥16



2-way Tap

Parameter	Frequency Range			Unit	Index							
	Normal				08	10	12	14	16	18	20	23
Tap Loss	Typical (Permissible Deviation)	5MHz	±0.5	dB	7.6	9.8	11.6	13.8	15.8	17.8	19.8	22.6
		50MHz	±0.5	dB	7.8	10.0	11.8	14.0	15.8	17.8	20.2	23.0
		550MHz	±0.5	dB	8.0	10.2	11.8	14.2	15.9	17.9	20.5	23.3
		750MHz	±1.0	dB	8.2	10.5	12.2	14.5	16.4	18.2	20.8	23.7
		1000MH	±1.0	dB	8.7	10.7	12.5	14.6	16.5	18.5	20.8	23.8
Insertion Loss	5MHz			dB	≤3.7	≤2.6	≤1.7	≤1.3	≤1.0	≤1.0	≤0.9	≤0.8
	50MHz			dB	≤3.5	≤2.4	≤1.5	≤1.3	≤1.0	≤1.0	≤0.7	≤0.7
	550MHz			dB	≤3.6	≤2.5	≤1.6	≤1.3	≤1.0	≤0.9	≤0.7	≤0.7
	750MHz			dB	≤3.9	≤2.6	≤1.7	≤1.4	≤1.2	≤1.2	≤0.8	≤0.8
	1000MHz			dB	≤4.0	≤2.9	≤2.3	≤1.6	≤1.4	≤1.2	≤1.0	≤0.9
Reverse Isolation	5-50MHz			dB	≥27	≥28	≥28	≥28	≥30	≥32	≥34	≥36
	50-550MHz			dB	≥24	≥25	≥25	≥25	≥28	≥30	≥32	≥32
	550-750MHz			dB	≥22	≥23	≥24	≥24	≥26	≥28	≥28	≥28
	750-1000MHz			dB	≥22	≥22	≥22	≥22	≥24	≥26	≥26	≥27
Tap-Tap Isolation	5-50MHz			dB	≥27	≥28	≥28	≥28	≥30	≥32	≥34	≥36
	50-550MHz			dB	≥25	≥25	≥25	≥25	≥28	≥30	≥32	≥32
	550-750MHz			dB	≥23	≥23	≥24	≥24	≥26	≥28	≥28	≥28
	750-1000MHz			dB	≥22	≥22	≥23	≥22	≥25	≥26	≥26	≥27
Return Loss	5-50MHz			dB	≥18	≥20	≥20	≥22	≥22	≥22	≥22	≥22
	50-550MHz			dB	≥20	≥20	≥20	≥20	≥20	≥20	≥20	≥20
	550-750MHz			dB	≥16	≥17	≥17	≥17	≥17	≥17	≥17	≥17
	750-1000MHz			dB	≥16	≥16	≥16	≥16	≥16	≥16	≥16	≥16



4-way Tap

Parameter	Frequency Range		Unit	Index								
	Normal			11(10)	12	14	16	17	20	22	23	
Tap Loss	Typical (Permissible Deviation)	5MHz	±0.5	dB	10.2	11.8	13.8	15.8	17.8	19.8	22.1	23.6
		50MHz	±0.5	dB	10.0	11.5	14.0	15.8	17.8	20.2	22.0	23.8
		550MHz	±0.5	dB	10.2	11.5	14.2	15.9	17.9	20.5	22.0	24.0
		750MHz	±1.0	dB	10.7	11.9	14.5	16.4	18.0	20.8	22.4	24.4
		1000MHz	±1.0	dB	11.5	12.5	14.6	16.5	18.5	20.8	22.4	24.6
Insertion Loss	5MHz		dB	≤3.7	≤2.6	≤1.7	≤1.3	≤1.0	≤1.0	≤0.9	≤0.8	
	50MHz		dB	≤3.5	≤2.4	≤1.5	≤1.3	≤1.0	≤1.0	≤0.7	≤0.7	
	550MHz		dB	≤3.6	≤2.5	≤1.6	≤1.3	≤1.0	≤0.9	≤0.7	≤0.7	
	750MHz		dB	≤3.9	≤2.6	≤1.7	≤1.4	≤1.2	≤1.2	≤0.8	≤0.8	
	1000MHz		dB	≤4.0	≤2.9	≤2.3	≤1.6	≤1.4	≤1.2	≤1.0	≤0.9	
Reverse Isolation	5-50MHz		dB	≥27	≥28	≥28	≥28	≥30	≥32	≥34	≥36	
	50-550MHz		dB	≥24	≥25	≥25	≥25	≥28	≥30	≥32	≥32	
	550-750MHz		dB	≥22	≥23	≥24	≥24	≥26	≥28	≥28	≥28	
	750-1000MHz		dB	≥20	≥20	≥22	≥22	≥24	≥26	≥26	≥27	
Tap-Tap Isolation	5-50MHz		dB	≥27	≥28	≥28	≥28	≥30	≥32	≥34	≥36	
	50-550MHz		dB	≥25	≥25	≥25	≥25	≥28	≥30	≥32	≥32	
	550-750MHz		dB	≥23	≥23	≥24	≥24	≥26	≥28	≥28	≥28	
	750-1000MHz		dB	≥22	≥22	≥23	≥22	≥25	≥26	≥26	≥27	
Return Loss	5-50MHz		dB	≥18	≥20	≥20	≥22	≥22	≥22	≥22	≥22	
	50-550MHz		dB	≥20	≥20	≥20	≥20	≥20	≥20	≥20	≥20	
	550-750MHz		dB	≥16	≥17	≥17	≥17	≥17	≥17	≥17	≥17	
	750-1000MHz		dB	≥16	≥16	≥16	≥16	≥16	≥16	≥16	≥16	



5-way Tap

Parameter	Frequency Range			Unit	Index							
	Normal				13(12)	14	16	18	20	22	24	26
Tap Loss	Typical (Permissible Deviation)	5MHz	±0.7	dB	11.9	14.2	15.9	17.9	19.8	22.1	23.6	25.5
		50MHz	±0.7	dB	11.8	14.0	15.9	17.9	20.2	22.0	23.8	25.8
		550MHz	±0.7	dB	11.7	14.0	15.9	17.9	20.5	22.0	24.0	26.0
		750MHz	±1.5	dB	12.7	14.5	16.5	18.2	20.8	22.4	24.4	26.2
		1000MHz	±1.5	dB	13.5	14.8	16.6	18.6	20.8	22.4	24.6	26.6
Insertion Loss	5MHz			dB	≤3.7	≤2.6	≤1.7	≤1.3	≤1.0	≤1.0	≤0.9	≤0.8
	50MHz			dB	≤3.5	≤2.4	≤1.5	≤1.3	≤1.0	≤1.0	≤0.7	≤0.7
	550MHz			dB	≤3.6	≤2.5	≤1.6	≤1.3	≤1.0	≤0.9	≤0.7	≤0.7
	750MHz			dB	≤3.9	≤2.6	≤1.7	≤1.4	≤1.2	≤1.2	≤0.8	≤0.8
	1000MHz			dB	≤4.0	≤2.9	≤2.3	≤1.6	≤1.4	≤1.2	≤1.0	≤0.9
Reverse Isolation	5-50MHz			dB	≥27	≥28	≥28	≥28	≥30	≥32	≥34	≥36
	50-550MHz			dB	≥24	≥25	≥25	≥25	≥28	≥30	≥32	≥32
	550-750MHz			dB	≥22	≥23	≥24	≥24	≥26	≥28	≥28	≥28
	750-1000MHz			dB	≥20	≥20	≥22	≥22	≥24	≥26	≥26	≥27
Tap-Tap Isolation	5-50MHz			dB	≥27	≥28	≥28	≥28	≥30	≥32	≥34	≥36
	50-550MHz			dB	≥25	≥25	≥25	≥25	≥28	≥30	≥32	≥32
	550-750MHz			dB	≥23	≥23	≥24	≥24	≥26	≥28	≥28	≥28
	750-1000MHz			dB	≥22	≥22	≥23	≥22	≥25	≥26	≥26	≥27
Return Loss	5-50MHz			dB	≥18	≥20	≥20	≥22	≥22	≥22	≥22	≥22
	50-550MHz			dB	≥20	≥20	≥20	≥20	≥20	≥20	≥20	≥20
	550-750MHz			dB	≥16	≥17	≥17	≥17	≥17	≥17	≥17	≥17
	750-1000MHz			dB	≥16	≥16	≥16	≥16	≥16	≥16	≥16	≥16



6-way Tap

Parameter	Frequency Range			Unit	Index							
	Normal				13(12)	14	16	18	20	22	24	26
Tap Loss	Typical (Permissible Deviation)	5MHz	±0.7	dB	11.9	14.2	15.9	17.9	19.8	22.1	23.6	25.5
		50MHz	±0.7	dB	11.8	14.0	15.9	17.9	20.2	22.0	23.8	25.8
		550MHz	±0.7	dB	11.7	14.0	15.9	17.9	20.5	22.0	24.0	26.0
		750MHz	±1.5	dB	12.7	14.5	16.5	18.2	20.8	22.4	24.4	26.2
		1000MHz	±1.5	dB	13.5	14.8	16.6	18.6	20.8	22.4	24.6	26.6
Insertion Loss	5MHz			dB	≤3.7	≤2.6	≤1.7	≤1.3	≤1.0	≤1.0	≤0.9	≤0.8
	50MHz			dB	≤3.5	≤2.4	≤1.5	≤1.3	≤1.0	≤1.0	≤0.7	≤0.7
	550MHz			dB	≤3.6	≤2.5	≤1.6	≤1.3	≤1.0	≤0.9	≤0.7	≤0.7
	750MHz			dB	≤3.9	≤2.6	≤1.7	≤1.4	≤1.2	≤1.2	≤0.8	≤0.8
	1000MHz			dB	≤4.0	≤2.9	≤2.3	≤1.6	≤1.4	≤1.2	≤1.0	≤0.9
Reverse Isolation	5-50MHz			dB	≥27	≥28	≥28	≥28	≥30	≥32	≥34	≥36
	50-550MHz			dB	≥24	≥25	≥25	≥25	≥28	≥30	≥32	≥32
	550-750MHz			dB	≥22	≥23	≥24	≥24	≥26	≥28	≥28	≥28
	750-1000MHz			dB	≥20	≥20	≥22	≥22	≥24	≥26	≥26	≥27
Tap-Tap Isolation	5-50MHz			dB	≥27	≥28	≥28	≥28	≥30	≥32	≥34	≥36
	50-550MHz			dB	≥25	≥25	≥25	≥25	≥28	≥30	≥32	≥32
	550-750MHz			dB	≥23	≥23	≥24	≥24	≥26	≥28	≥28	≥28
	750-1000MHz			dB	≥22	≥22	≥23	≥22	≥25	≥26	≥26	≥27
Return Loss	5-50MHz			dB	≥18	≥20	≥20	≥22	≥22	≥22	≥22	≥22
	50-550MHz			dB	≥20	≥20	≥20	≥20	≥20	≥20	≥20	≥20
	550-750MHz			dB	≥16	≥17	≥17	≥17	≥17	≥17	≥17	≥17
	750-1000MHz			dB	≥16	≥16	≥16	≥16	≥16	≥16	≥16	≥16



8-way Tap

Parameter	Frequency Range			Unit	Index							
	Normal				14	16	17	20	22	23	26	28
Tap Loss	Typical (Permissible Deviation)	5MHz	±0.7	dB	14.2	15.9	17.9	19.8	22.1	23.6	25.5	27.8
		50MHz	±0.7	dB	14.0	15.9	17.9	20.2	22.0	23.8	25.8	27.9
		550MHz	±0.7	dB	14.0	15.9	17.9	20.5	22.0	24.0	26.0	28.1
		750MHz	±1.5	dB	14.5	16.5	18.2	20.8	22.4	24.4	26.2	28.3
		1000MHz	±1.5	dB	14.8	16.6	18.6	20.8	22.4	24.6	26.6	28.5
Insertion Loss	5MHz			dB	≤3.7	≤2.6	≤1.7	≤1.3	≤1.0	≤1.0	≤0.9	≤1.0
	50MHz			dB	≤3.5	≤2.4	≤1.5	≤1.3	≤1.0	≤1.0	≤0.7	≤1.0
	550MHz			dB	≤3.6	≤2.5	≤1.6	≤1.3	≤1.0	≤0.9	≤0.7	≤0.9
	750MHz			dB	≤3.9	≤2.6	≤1.7	≤1.4	≤1.2	≤1.2	≤0.8	≤1.0
	1000MHz			dB	≤4.0	≤2.9	≤2.3	≤1.6	≤1.4	≤1.2	≤1.0	≤1.0
Reverse Isolation	5-50MHz			dB	≥27	≥28	≥28	≥28	≥30	≥32	≥34	≥36
	50-550MHz			dB	≥24	≥25	≥25	≥25	≥28	≥30	≥32	≥32
	550-750MHz			dB	≥22	≥23	≥24	≥24	≥26	≥28	≥28	≥28
	750-1000MHz			dB	≥20	≥20	≥22	≥22	≥24	≥26	≥26	≥27
Tap-Tap Isolation	5-50MHz			dB	≥27	≥28	≥28	≥28	≥30	≥32	≥34	≥36
	50-550MHz			dB	≥25	≥25	≥25	≥25	≥28	≥30	≥32	≥32
	550-750MHz			dB	≥23	≥23	≥24	≥24	≥26	≥28	≥28	≥28
	750-1000MHz			dB	≥22	≥22	≥23	≥22	≥25	≥26	≥26	≥27
Return Loss	5-50MHz			dB	≥18	≥20	≥20	≥22	≥22	≥22	≥22	≥22
	50-550MHz			dB	≥20	≥20	≥20	≥20	≥20	≥20	≥20	≥20
	550-750MHz			dB	≥16	≥17	≥17	≥17	≥17	≥17	≥17	≥17
	750-1000MHz			dB	≥16	≥16	≥16	≥16	≥16	≥16	≥16	≥16