

- Frequency range 5-1800 MHz
- Housing including RF/AC bypass switch  
3.0 GHz ready
- Traditional dB values available for  
2/4/8-way faceplates
- No-screw in/out connector design for 4x  
faster installation
- Range of conditioning plug-ins available

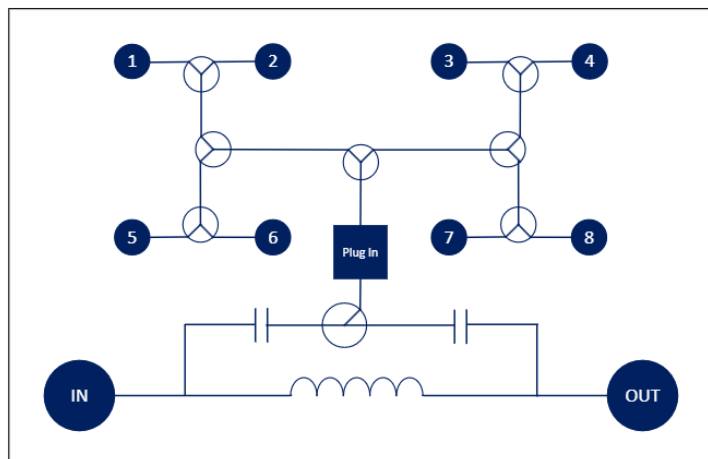


## Overview

To upgrade the outdoor access network to DOCSIS® 4.0 the products need to support an extended frequency band to 1.8 GHz. This product is developed to meet the needs of the American market following SCTE guidelines for 1.8 GHz hardline multitaps.

The no-screw in/out connector interface is greatly improved to meet the high RF performance and low maintenance needs of DOCSIS 4.0 deployments. The by default horizontally positioned connectors can be turned easily into the bottom position for pedestal installation when both cables come directly from the ground.

**Block diagram**



**OTTZ multitaps device and performance specifications**

**8-way specifications**

Parameter		8-11T		8-14		8-17		8-20		8-23		8-26		8-29	
		Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.
Insertion loss In/Out (dB)	5 MHz			3.0		1.8		1.3		0.9		0.5		0.3	
	10 MHz		+/- 0.5	3.0	+/- 0.5	1.6	+/- 0.5	1.2	+/- 0.5	0.9	+/- 0.5	0.5	+/- 0.5	0.3	+/- 0.5
	50 MHz		+/- 0.5	3.0	+/- 0.5	1.6	+/- 0.5	1.2	+/- 0.5	0.9	+/- 0.5	0.5	+/- 0.5	0.4	+/- 0.5
	256 MHz		+/- 0.5	3.1	+/- 0.5	1.8	+/- 0.5	1.4	+/- 0.5	0.9	+/- 0.5	0.5	+/- 0.5	0.5	+/- 0.5
	862 MHz		+/- 0.5	4.1	+/- 0.5	2.4	+/- 0.5	2.0	+/- 0.5	1.2	+/- 0.5	0.8	+/- 0.5	0.6	+/- 0.5
	1006 MHz		+/- 0.5	4.4	+/- 0.5	2.5	+/- 0.5	2.2	+/- 0.5	1.4	+/- 0.5	0.9	+/- 0.5	0.7	+/- 0.5
	1218 MHz		+/- 0.5	4.6	+/- 0.5	2.7	+/- 0.5	2.4	+/- 0.5	1.6	+/- 0.5	1.0	+/- 0.5	0.8	+/- 0.5
Insertion loss In/Tap (dB)	1800 MHz		+/- 0.5	5.0	+/- 0.5	3.5	+/- 0.5	2.8	+/- 0.5	2.5	+/- 0.5	1.4	+/- 0.5	1.3	+/- 0.5
	5-10 MHz	11.0		15.5		18.0		20.5		23.5		27.0		29.5	
	10-50 MHz	11.0	+/- 1.0	15.5	+/- 1.0	18.0	+/- 1.0	20.5	+/- 1.0	23.5	+/- 1.0	27.0	+/- 1.0	29.5	+/- 1.0
	50-105 MHz	11.0	+/- 1.0	15.5	+/- 1.0	18.0	+/- 1.0	20.5	+/- 1.0	23.5	+/- 1.0	27.0	+/- 1.0	29.5	+/- 1.0
	105-256 MHz	11.0	+/- 1.0	15.5	+/- 1.0	18.0	+/- 1.0	20.5	+/- 1.0	23.5	+/- 1.0	27.0	+/- 1.0	29.5	+/- 1.0
	256-862 MHz	11.0	+/- 1.0	15.5	+/- 1.0	18.5	+/- 1.0	20.5	+/- 1.0	24.2	+/- 1.0	27.5	+/- 1.0	29.5	+/- 1.0
	862-1006 MHz	11.5	+/- 1.0	15.5	+/- 1.0	18.5	+/- 1.0	20.5	+/- 1.0	24.5	+/- 1.0	27.5	+/- 1.0	29.5	+/- 1.0
	1006-1218 MHz	11.5	+/- 1.0	15.5	+/- 1.0	18.5	+/- 1.0	20.5	+/- 1.0	24.5	+/- 1.0	27.5	+/- 1.0	29.5	+/- 1.0
1218-1800 MHz	12.5	+/- 1.5	17.0	+/- 1.5	19.5	+/- 1.5	20.5	+/- 1.5	24.5	+/- 1.5	27.5	+/- 1.5	29.5	+/- 1.5	

# Outdoor multitaps

## 1.8 GHz 8-way traditional outdoor multitaps

### Electrical

Parameter	Frequency	OTTZ-8-xx			Units	Notes
		Min.	Typ.	Max.		
Frequency		5		1800	MHz	
Impedance			75		$\Omega$	
Power passing	In to Out			15	A	1
Hum modulation	5-1800 MHz	60			dB	2,4
Shielding effectiveness	5-1800 MHz	105			dB	3
Surge protection				6	kV	5
Return loss	All ports	5-10 MHz	10		dB	
		10-1800 MHz	16		dB	
Isolation	Out/Tap	5-10 MHz	18		dB	
		10-50 MHz	20		dB	
		50-256 MHz	25		dB	
		256-1218 MHz	20		dB	
		1218-1800 MHz	18		dB	
	Tap/Tap	5-10 MHz	16		dB	
		10-256 MHz	20		dB	
		256-1218 MHz	18		dB	
	1218-1800 MHz	16		dB		

### Notes

Specifications measured at room temperature +25°C (+77°F).

Specifications <10 MHz are to be considered as typical values.

- 30-90 V @ 50 Hz
- Tested at 10 A
- SCTE IPS-TP403
- 5 dB degradation allowed when measured at 15 A.
- IEEE-C62.41, Combination Wave, Category B3 (rise time 1.2  $\mu$ S / fall time 50  $\mu$ S). No degradation allowed.

### Mechanical and environmental specifications

Parameter	OTTZ-8-xx	Units	Notes
Connectors	Input and output	KS female, ANSI/SCTE91 2009 standard	
	Tap ports	F female, ANSI-SCTE 01 2015 standard	
Housing material	Wide body	Diecast aluminum; trivalent chromate base, polyurethane paint top layer	
Temperature	Operational	-40°C to +65°C (-40°F to +149°F)	°C/°F
	Storage	-40°C to +85°C (-40°F to +185°F)	°C/°F
Dimensions (H x W x D)	4.5"H x 5.7"W x 2.4"D (11.4H x 14.5W x 6.1D cm)	in/cm	
Weight	0.02 oz (0.51 g)	oz/g	

Parameter	Standard	Severity
Salt fog	ASTM B117	1000 hr exposure
UV degradation	ASTM G154	1000 hr exposure
Port sealing	SCTE-265-2021	IP68 - 1 meter for 1 week

# Outdoor multitaps

## 1.8 GHz 8-way traditional outdoor multitaps



### Order information

Item code	Model code	Description
19014610	OTTZ-8-11T	OUTDOOR TAP TECHNETIX WIDE 8-WAY 11 dB 1.8 GHz TERM
19014611	OTTZ-8-14	OUTDOOR TAP TECHNETIX WIDE 8-WAY 14 dB 1.8 GHz
19014612	OTTZ-8-17	OUTDOOR TAP TECHNETIX WIDE 8 WAY 17 dB 1.8 GHz
19014613	OTTZ-8-20	OUTDOOR TAP TECHNETIX WIDE 8-WAY 20 dB 1.8 GHz
19014614	OTTZ-8-23	OUTDOOR TAP TECHNETIX WIDE 8-WAY 23 dB 1.8 GHz
19014615	OTTZ-8-26	OUTDOOR TAP TECHNETIX WIDE 8-WAY 26 dB 1.8 GHz
19014616	OTTZ-8-29	OUTDOOR TAP TECHNETIX WIDE 8-WAY 29 dB 1.8 GHz