

OTRX 4-way 1.2GHz Regal Tap

- › 5-1218MHz
- › Hum and noise tested to ANSI/SCTE 16 2001
- › RF and power bypass capability
- › Compatible with existing Regal Taps
- › Available in faceplate only replacements



Overview

The Technetix OTRX series of Regal compatible outdoor taps now offers a complete line in outdoor tap passives.

All OTRX 4-way outdoor taps are mechanically identical in shape with tap values between 8 and 29dB. All taps feature sealed female F-ports for drop cable connection on the faceplate and 5/8"-24NEF-female ports for input and output cable connection on the housing.

The housing has an AC-RF bypass switch as standard, allowing faceplates to be changed without loss of power or RF through the tap housing. The faceplates are compatible with other Regal hardware. Taps may be strand mounted through the clamp at the back of the housing, or can be surface mounted with an optional bracket.

Also, both the housing and connector design and material selection combine to provide first class leading corrosion resistance.

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Specifications											
Parameter		MHz	4-8	4-11	4-14	4-17	4-20	4-23	4-26	4-29	
Frequency Range		5-1218									
			Max	Max	Max	Max	Max	Max	Max	Max	
Insertion Loss (dB)	In to tap	5 ¹	8	13.6	12.6	15.3	18.9	21.5	24.3	27.5	
		10-1006	9	12	15	18	21	24	27	30	
		1006-1218	9	12	15	18	21	24	27	30	
	In to out	5 ¹	n/a	3.9	2.2	1.3	1.2	1.0	0.7	0.7	
		50	n/a	3.6	1.8	1.2	1.1	0.9	0.6	0.6	
		100	n/a	3.5	1.8	1.2	1.1	0.9	0.7	0.7	
		150	n/a	3.6	2.0	1.3	1.2	1.0	0.8	0.8	
		450	n/a	4.2	2.4	1.7	1.5	1.3	1.1	1.1	
		550	n/a	4.4	2.6	1.9	1.5	1.4	1.2	1.2	
		750	n/a	4.4	2.8	1.9	1.6	1.5	1.3	1.3	
Return Loss	All Ports	5 ¹	16	12.8	16	16	16	16	16	16	
		10-1218	16	16	16	16	16	16	16	16	
		5 ¹	20	17.9	20	20	20	20	20	20	
		10-1006	25	25	25	25	25	25	25	25	
		1006-1218	20	20	20	20	20	20	20	20	
		5 ¹	20	15.1	20	20	20	20	20	20	
		10-1006	25	25	25	25	25	25	25	25	
		1006-1218	20	20	20	20	20	20	20	20	
		Screening efficiency (dB) ²		5-300	>95						
				300-470	>90						
		470-950	>85								
		950-1218	>85								
Shielding Effectiveness (dBi,min) ³		5-1218	110								
Power passing (Amps AC/DC) ⁴			12								
Hum Modulation (dB,min) ⁵	All ports		5-750				-65				
			750-1218				-60				
DC power blocking			All F-ports								
Surge Class Conformance ⁶	All ports		6KV								
Impedance (Ohm, typ)			75								
Temperature Range			Min				Max				
		Operating ⁷	-40				+65				
		Storage	-40				+70				
		Specification	+18				+24				
Connectors	Type	Input / Output	5/8" – 24 NEF Female								
		Tap	F-Female								
Dimensions L x H x D (mm)			97.7x100.4x71.7								
Impedance (Ω)			75								
MTBF			100000								
Equipment Approval			CE								

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Remarks	
All Specifications are measured at room temperature	
1	Typical specification
2	According to EN 50083-2 2012
3	Tested according to SCTE IPS-TP-403
4	Range between 30-90 VAC@50Hz / VDC
5	At 10A, 60-90 VAC
6	IEEE-C62.14, combination wave, 3KA, category B3@2Ω
7	Insertion Loss varies - Typical = <+0.25dB, Maximum=<+0.5dB Isolation varies – Typical = <+1dB, Maximum=<+2dB Return Loss varies – Typical = <+1dB, Maximum=<+2dB

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Mechanical and Environmental Specifications			
Test	Conditions		Requirements
Air Leakage	Medium	Water	No air leakage
	Duration	1 minute	
	Pressure	1.5kg/cm ²	
Physical Drop	Height	3ft/91cm	No physical damage
	Surface	Hard (concrete)	
	No. of drops	5	
	Impact Point	5	
Salt Fog	Duration	672 hours (28 days)	According to ASTM B117
Temp Cycling with Humidity	Temperature	-40°F - 140°F	No electrical damage
		-40°C - 60°C	Measured when dry
	Duration	3 hrs extremes – 3 hrs transition	
	Humidity	95% RH	
UV Degradation	Exposure	QUV Weatherometer	According to Bellcore GR-2873
	Radiation Type	UVB-313 (ASTM G154)	For surface degradation
	Cycle	4 hrs UV – 4 hrs condensation	
	Duration	100hrs	
Water Immersion	Depth	47.24 inches / 1.2metres	No water ingress
	Meters duration	168hrs	
Vibration	Frequency	10-55Hz	No electrical damage
	Position	Vertical	
	Duration	20 minutes	
	Average Position	Horizontal X-Y	
	Duration	20 minutes	
Ozone Mechanical	SCTE 01 2015		According to ASTM D1171 Specification for F-port, female, outdoor
	Bellcore GR-2873		Vibration and Impact
Environmental	ASTM B117		Standard Practice for operating salt fog apparatus
	ASTM B827		Standard practice for conduction mixed flowing gas environmental test
	Bellcore GR-2873		Temperature cycling with humidity
	Bellcore GR-2873		Water immersion
	Bellcore GR-2873		Salt fog exposure
	Bellcore GR-2873		Environmental pollutants
	Bellcore GR-2873		Chemical resistance
Electrical	IEEE C62.41-1991		Recommended practice on surge voltages on low-voltage AC power circuits
	SCTE 48-1 2007		Surge withstand test procedure
Ingress	SCTE 81 2007		Test method for measuring shielding effectiveness using a GTEM cell
Transmission	SCTE 16 2001R2007		Test procedure for hum modulation
WEEE (2002/96/EC)	Complete product		Marked with wheelie bin logo
RoHS (2002/95/EC)	Complete product		Complies to RoHS

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	Port	Range	Min	Typical	Max	Units
Connectors	In					
	Tap					
Temperature Range	Operating		-40		+60	°C
			-40		+140	°F
	Storage		-60		+70	°C
			-76		+158	°F
Weight	Tap			478		Gram
	Faceplate			195		Gram
Material	F-Connector			NiSn Plated Brass		
	F-spring			NiSn Plated Beryllium Copper		
	Housing			Die cast aluminum with Tri-valent Chromate base layer, paint top layer		
Colour	Housing			Gray		