

OTVCX-xx PTP – vertically mounted configurable outdoor tap with Power Insertion Port

- Configurable outdoor tap enabling vertical connections
- Optional test point lid (TP)
- Excellent RF and hum modulation performance
- Designed for extreme environmental conditions
- Dedicated power insertion port



Overview

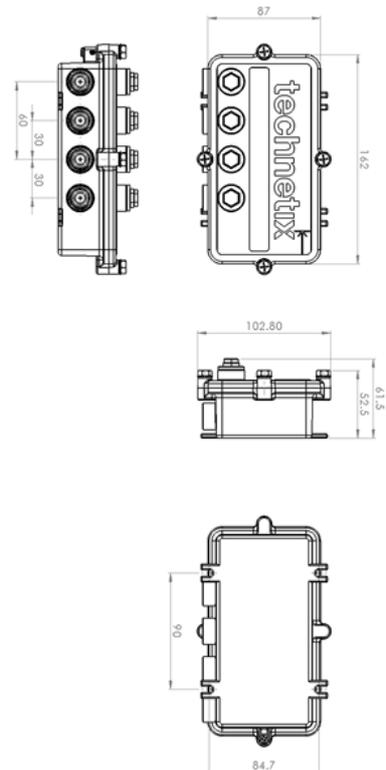
The OTVCX series of 1.2Ghz configurable outdoor taps includes various values. The unit can be configured by inserting the required value plug-in into the main board of the unit.

The taps are offered with the option of a test point lid. The test point lid allows a test probe to be used to check incoming/outgoing RF/power without removing the lid or disconnecting cables. A dedicated power insertion port is provided for injecting power.

Providing surge protection on all ports, and excellent RF and hum modulation performance, the couplers feature 5/8" -24 NEF-female ports for input and output cable connection on the housing.

The units are surface mountable and to aid installation in street cabinets, all ports are on the bottom edge of the unit, pointing in the same direction.

Tested under extreme environmental conditions, the couplers are designed to operate near salt water, along busy highways and in very hot conditions.



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Specifications

		MHz	PI Jump		4dB		7dB		10dB		13dB		16dB		19dB		22dB			
			Typ	Max	Typ	Max	Typ	Max	Typ	Max	Typ	Max	Typ	Max	Typ	Max	Typ	Max		
Insertion loss (dB) ⁵	In to Out	10-65	N/A		5	5	2.3	2.8	2.5	2.5	1.5	1.8	1	1.4	1	1.4	1	1.4		
		65-300			5	5	2.8	3	2.5	2.5	1.5	1.8	1.2	1.8	1.2	1.8	1.2	1.8	1.2	1.8
		300-550			5	5	3.5	3	2.6	2.6	1.3	1.7	1	1.8	1	1.8	1	1.8	1	1.8
		550-750			5.5	5.5	2.8	3.2	2.9	2.9	1.4	2	1.2	1.8	1.2	1.8	1.2	1.8	1.2	1.8
		750-862			5.5	5.5	3	3.7	2.9	2.9	1.7	2.3	1.2	2	1.2	2	1.2	2	1.2	2
		862-1000			5.5	5.5	3.2	3.9	3.2	3.2	2.2	2.6	1.8	2.3	1.8	2.3	1.8	2.3	1.8	2.3
		1000-1218			5.5	5.5	3.8	4.5	3.5	3.5	2.8	3.3	2	2.6	2	2.6	2	2.6	2	2.6
	In to Tap	10 – 15	1	1.5	5	5	8	8.5	11.5	11.5	13	14.5	17	17.5	19.5	20.5	23	23.5		
		15 – 65	1	1.5	5	5	8	8.5	11	11	13	14.5	17	17.5	19	20	22	23		
		65 – 300	1	1.5	5	5	8	8.5	11	11	13	14	16	17	19	20	22	23		
300 - 1000		1	1.5	5	5	7	8	11	11	13	14	16	17	18	20	21	23			
1000-1218		1.5	2	5.5	5.5	8	8.5	11	11	13	14	16	17	19	20	21.5	23			
Return loss (dB, typ)	All ports	10 – 40 ⁵	20	18	20	18	18	18	20	18	20	18	20	18	20	18	20	18		
		40 - 1218 ^{1,5}	20	18	20	18	20	18	20	18	20	18	20	18	20	18	20	18		
Isolation (dB) ⁵	Tap to Out	10-15	N/A		22	20	22	20	22	20	22	20	20	20	20	20	20	20		
		15-65			25	25	25	25	25	25	25	25	30	30	30	30	30	30		
		65-862			25	22	25	22	25	22	25	22	27	22	27	22	27	22	22	
		862-1000			25	20	25	20	25	20	25	20	25	20	25	20	25	20	25	20
		1000-1218			22	20	22	20	22	20	22	20	22	20	23	20	23	20	23	20
Screening efficiency (dB) ⁴	10-300	>85																		
	300-470	>80																		
	470-950	>75																		
	950-1218	>55																		
Hum modulation (dB) ²		-70																		
Power passing (Amps AC/DC)		10																		
Surge withstand (V) ³		1000																		
Surge Class conformance	All ports	1kV combination wave, 1.2µs rise time, 50µs fall time on all ports																		
Impedance (Ohm, typ)		75																		
Connectors	Input	5/8-24 UNEF (KS) Female																		
	Outputs	5/8-24 UNEF (KS) Female																		
Material	Housing	Aluminium, liquid paint over Alocrom 1000																		
	Connector plating	Tin-Nickel																		
Temperature range	Operating	-40°C to +60°C																		
Current Passing Capability	All Ports	10A																		
	Fuses	10A																		
Equipment Approval		CE																		

Remarks

	Measurements taken at room temperature.
1	18dB - 1.5dB per octave.
2	Average @ 10A Power Passing, 20MHz stepping from 10MHz to 1GHz and 50MHz stepping from 1GHz to 1.2GHz.
3	1kV combination wave, 1.2µs rise time, 50µs fall time on all ports.
4	Class A according to EN 50083-2:2012.
5	Coupling tolerances ±0.5dB for insertion loss and ±1.0dB for Return loss and Isolation for different plugin match.

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Performance parameter	Details	
Connectors	Input and Output	Female (5/8" -24NEF)
Water immersion (IP68)	Tighten torque on connectors	2.26 Nm (< 20 In-Lb)
	Water head	1m (3.28 ft)
	Duration	168 hrs
	Observation: no water leak	No electrical degradation after dry
Temperature cycling with humidity (EN 60068-2-30:2005)	Temperature	+4°C to +60°C (+39.2°F to +140°F)
	Extreme temperature duration	3 hrs
	Transient	3 hrs
	Humidity	95% RH
	Number of cycles	20
	Observation: no water leakage	No electrical degradation after dry
High temperature cycling (EN 60068-2-2:2007)	Temperature	+60°C (+140°F)
	Duration	48 hrs
	Observation: no crack or damage	No electrical degradation after dry
Drop test (EN 60068-2-32:1993, IEC 68-2-32:1975)	75cm (29.5 in) high onto concrete floor or metal plate surface	Corner, edge and port
	Number of drop for each impact point	1
	Observation: no crack on metal	No electrical performance degradation
Salt fog (MSTM-B-117)	Tighten torque on connectors	2.26 Nm (< 20 In-Lb)
	Temperature	+35°C (+95°F)
	Salt percentage and acidity	5% and pH7
	Duration	672 hrs
	Number of cycles	Continues
	Observation: no electrical performance degradation	No metal corrosion or salt incursion
WEEE (2002/96/EC)	Complete product	Marked with wheelie bin logo
RoHS (2002/95/EC)	Complete product	Complies to RoHS
Temperature	Operating temperature	-40°C to +60°C (-40°F to +140°F)

Ordering information

Taps

Item Name	Article number
OTVCX-xx	19007229
OTVCX-xx TP	19007233
OTVCX-xx P	19007231
OTVCX-xx PTP	19007234

Power inserter

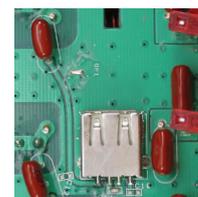
Item Name	Article number
SPI-KS-2MB	19007163

Test probe

Item Name	Article number
TXJTP12-2000	19008862

Plugins

Item Name	Article number
PI-VCX-PI	19007233
PI-VCX-4	19007234
PI-VCX-7	19007235
PI-VCX-10	19007236
PI-VCX-13	19007237
PI-VCX-16	19007238
PI-VCX-19	19007239
PI-VCX-22	19007240



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