

# Regal<sup>®</sup> Taps

## RMT2000 1 GHz Multi-Taps

### FEATURES

- Factory installed Continuous Power Bus (CPB) for uninterrupted power and RF service when the faceplate is removed
- 2.5 kV surge resistance, ANS/IEEE C62.41-1991, Class B, 2500 V surge
- 12 amp current capacity improved
- Superior EMI isolation characteristics and corrosion protection
- Available in narrow- and wide-body housings
- 5 MHz to 1 GHz bandwidth capacity; low loss performance
- Migration strategy allows the operator to upgrade network power capacity without the expense of replacing taps
- Can upgrade from existing Regal taps simply by switching the faceplate



### APPLICATION

In today's systems more power is required to meet the demand for video, voice, and data services. In order to meet these requirements, Regal<sup>®</sup> introduced the RMT2000 RF Only Tap. This RF Only Tap is an integral part of the RMT2000 family. With its 12 amp current capacity and improved RF performance the network's powering capacity can be upgraded without the expense of replacing taps.

Regal was the first to develop the Continuous Power Bus (CPB), a standard feature in the RMT2000, which provides uninterrupted power and RF service even if the faceplate is removed.

## SPECIFICATIONS

RMT2002-RF-XX (XX Denotes Tap Value)

**1 GHz, 2-Way RF Only Narrow Body Multi-Tap****Return Loss (In/Out/Tap, Min)**

Frequency (MHz)	5-10	11-20	21-400	401-500	501-600	601-700	701-900	901-1002
Return Loss (dB)	16	18	18	18	17	16	16	16
RMT2002-RF-4 (dB)	16	18	18	18	17	16	16	16

**Insertion Loss (Max)**

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-10 MHz	T	3.5	1.7	1.2	0.7	0.5	0.4	0.4	0.4	0.4
11-50 MHz	T	3.5	1.6	1.1	0.7	0.5	0.4	0.4	0.4	0.4
51-100 MHz	T	3.5	1.6	1.1	0.7	0.5	0.5	0.5	0.5	0.5
101-300 MHz	T	3.8	1.9	1.4	1.0	0.7	0.7	0.7	0.7	0.7
301-400 MHz	T	3.9	1.9	1.4	1.0	0.8	0.8	0.8	0.8	0.8
401-500 MHz	T	4.1	2.1	1.5	1.0	0.8	0.8	0.8	0.8	0.8
501-600 MHz	T	4.3	2.3	1.6	1.1	0.8	0.8	0.8	0.8	0.8
601-700 MHz	T	4.6	2.5	1.8	1.3	1.0	0.9	0.9	0.9	0.9
701-800 MHz	T	4.9	2.8	2.1	1.4	1.2	1.1	1.1	1.1	1.1
801-900 MHz	T	5.0	3.1	2.6	1.7	1.4	1.3	1.3	1.3	1.3
901-1002 MHz	T	5.0	3.5	3.1	2.3	1.8	1.7	1.7	1.7	1.7

**Tap-to-Tap Isolation (Min)**

Frequency (MHz)	5-10	11-20	21-400	401-500	501-600	601-700	701-900	901-1002
Tap-to-Tap (dB)	18	23	25	25	23	21	21	19
RMT2002-RF-11 (dB)	18	20	20	20	20	20	20	19

**Tap Loss Tolerance**

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-500 MHz	± 1.0	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5
501-600 MHz	± 1.3	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5
601-900 MHz	± 1.7	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.8
901-1002 MHz	± 2.0	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 2.0

**Output-to-Tap Isolation (Min)**

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-10 MHz	T	18	18	20	30	30	35	38	40	42
11-50 MHz	T	20	25	20	30	30	37	45	42	43
51-300 MHz	T	25	25	25	30	30	35	35	42	44
301-400 MHz	T	23	23	23	30	30	33	35	42	44
401-500 MHz	T	22	22	22	30	30	33	33	40	42
501-600 MHz	T	21	21	21	30	27	32	30	39	41
601-900 MHz	T	19	19	19	28	25	28	26	30	32
901-1002 MHz	T	18	18	18	25	23	27	25	27	31

## SPECIFICATIONS

RMT2004-RF-XX (XX Denotes Tap Value)

## 1 GHz, 4-Way RF Only Narrow Body Multi-Tap

## Return Loss (In/Out/Tap, Min)

Frequency (MHz)	5-10	11-20	21-400	401-500	501-600	601-700	701-900	901-1002
Return Loss (dB)	16	18	18	18	17	16	16	16
RMT2004-RF-8 (dB)	16	18	18	18	17	16	16	16

## Insertion Loss (Max)

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-10 MHz	N/A	T	3.5	1.7	1.2	0.9	0.7	0.4	0.4	0.4
11-50 MHz	N/A	T	3.6	1.6	1.1	0.8	0.6	0.4	0.4	0.4
51-100 MHz	N/A	T	3.8	1.9	1.3	0.9	0.6	0.5	0.5	0.5
101-300 MHz	N/A	T	3.8	1.9	1.3	1.1	0.8	0.7	0.7	0.7
301-400 MHz	N/A	T	4.0	2.1	1.6	1.1	0.9	0.9	0.9	0.9
401-500 MHz	N/A	T	4.0	2.2	1.6	1.2	0.9	0.8	0.8	0.8
501-600 MHz	N/A	T	4.2	2.3	1.7	1.2	1.0	0.9	0.8	0.8
601-700 MHz	N/A	T	4.7	2.6	1.9	1.3	1.1	1.0	0.9	0.9
701-800 MHz	N/A	T	4.9	2.8	2.2	1.5	1.3	1.2	1.2	1.2
801-900 MHz	N/A	T	4.9	3.3	2.5	1.7	1.4	1.4	1.4	1.4
901-1002 MHz	N/A	T	5.0	3.8	3.0	2.1	1.7	1.7	1.7	1.7

## Tap-to-Tap Isolation (Min)

Frequency (MHz)	5-10	11-20	21-400	401-500	501-600	601-700	701-900	901-1002
Tap-to-Tap (dB)	18	23	25	25	23	21	21	19
RMT2004-RF-14 (dB)	18	21	23	23	23	23	22	19

## Tap Loss Tolerance

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-500 MHz	N/A	± 1.0	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5
501-600 MHz	N/A	± 1.3	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5
601-900 MHz	N/A	± 1.7	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.8
901-1002 MHz	N/A	± 2.0	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 2.0

## Output-to-Tap Isolation (Min)

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-10 MHz	N/A	T	18	20	23	35	35	38	40	42
11-50 MHz	N/A	T	25	20	26	35	37	40	42	43
51-300 MHz	N/A	T	25	23	23	35	35	35	40	41
301-400 MHz	N/A	T	23	21	23	35	33	34	40	41
401-500 MHz	N/A	T	22	20	21	33	33	33	38	39
501-600 MHz	N/A	T	21	22	20	33	32	30	37	37
601-900 MHz	N/A	T	20	19	19	30	28	26	30	32
901-1002 MHz	N/A	T	18	18	18	28	27	25	27	31

## SPECIFICATIONS

RMT2002W-RF-XX (XX Denotes Tap Value)

**1 GHz, 2-Way RF Only Wide Body Multi-Tap****Return Loss (In/Out/Tap, Min)**

Frequency (MHz)	5-10	11-20	21-400	401-500	501-600	601-700	701-900	901-1002
Return Loss (dB)	16	18	18	18	17	16	16	16
RMT2002W-RF-4 (dB)	16	18	18	18	17	16	16	16

**Insertion Loss (Max)**

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-10 MHz	T	3.5	1.7	1.2	0.7	0.7	0.7	0.7	0.7	0.7
11-50 MHz	T	3.5	1.6	1.2	0.7	0.7	0.7	0.7	0.7	0.7
51-100 MHz	T	3.7	1.6	1.2	0.7	0.7	0.7	0.7	0.7	0.7
101-300 MHz	T	3.8	1.7	1.3	0.8	0.7	0.7	0.7	0.7	0.7
301-400 MHz	T	3.9	1.9	1.6	1.0	1.0	0.8	0.8	0.8	0.8
401-500 MHz	T	3.9	2.1	1.6	1.0	1.0	0.8	0.8	0.8	0.8
501-600 MHz	T	4.2	2.2	1.6	1.1	1.0	0.8	0.8	0.8	0.8
601-700 MHz	T	4.5	2.4	1.8	1.3	1.1	0.9	0.9	0.9	0.9
701-800 MHz	T	4.6	2.6	2.1	1.4	1.2	1.1	1.1	1.1	1.1
801-900 MHz	T	4.7	2.8	2.4	1.6	1.3	1.3	1.3	1.3	1.3
901-1002 MHz	T	4.8	3.3	2.9	1.9	1.6	1.6	1.6	1.6	1.6

**Tap-to-Tap Isolation (Min)**

Frequency (MHz)	5-10	11-20	21-400	401-500	501-600	601-700	701-900	901-1002
Tap-to-Tap (dB)	18	23	25	25	23	21	21	18

**Tap Loss Tolerance**

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-500 MHz	± 1.0	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5
501-600 MHz	± 1.3	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5
601-900 MHz	± 1.7	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5
901-1002 MHz	± 2.0	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 2.0

**Output-to-Tap Isolation (Min)**

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-10 MHz	T	18	18	20	30	30	35	38	40	42
11-50 MHz	T	25	25	20	30	30	37	40	42	43
51-300 MHz	T	25	25	23	30	30	35	35	42	44
301-400 MHz	T	23	23	21	30	30	33	34	42	44
401-500 MHz	T	22	22	20	30	30	33	33	40	42
501-600 MHz	T	21	21	20	30	27	32	30	39	41
601-900 MHz	T	19	19	19	28	25	26	26	30	32
901-1002 MHz	T	18	18	18	25	23	25	25	27	31

## SPECIFICATIONS

RMT2004W-RF-XX (XX Denotes Tap Value)

**1 GHz, 4-Way RF Only Wide Body Multi-Tap****Return Loss (In/Out/Tap, Min)**

Frequency (MHz)	5-10	11-20	21-400	401-500	501-600	601-700	701-900	901-1002
Return Loss (dB)	16	18	18	18	17	16	16	16
RMT2004W-RF-8 (dB)	16	18	18	18	17	16	16	16
RMT2004W-RF-14 (dB)	16	18	18	18	17	16	16	16

**Insertion Loss (Max)**

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-10 MHz	N/A	T	3.3	1.7	1.3	0.9	0.8	0.7	0.7	0.7
11-50 MHz	N/A	T	3.5	1.6	1.2	0.8	0.7	0.7	0.7	0.7
51-100 MHz	N/A	T	3.7	1.9	1.4	1.1	0.8	0.7	0.7	0.7
101-300 MHz	N/A	T	3.7	1.9	1.4	1.1	0.8	0.8	0.7	0.7
301-400 MHz	N/A	T	4.0	2.0	1.6	1.3	1.0	0.8	0.8	0.8
401-500 MHz	N/A	T	4.0	2.1	1.6	1.3	1.0	0.8	0.8	0.8
501-600 MHz	N/A	T	4.2	2.2	1.7	1.3	1.0	0.8	0.8	0.8
601-700 MHz	N/A	T	4.4	2.5	2.0	1.3	1.1	0.9	0.9	0.9
701-800 MHz	N/A	T	4.6	2.8	2.3	1.5	1.2	1.1	1.1	1.1
801-900 MHz	N/A	T	4.6	3.1	2.7	1.7	1.4	1.3	1.3	1.3
901-1002 MHz	N/A	T	4.8	3.6	3.0	2.1	1.6	1.6	1.6	1.6

**Tap-to-Tap Isolation (Min)**

Frequency (MHz)	5-10	11-20	21-400	401-500	501-600	601-700	701-900	901-1002
Tap-to-Tap (dB)	20	23	25	25	25	21	21	19
RMT2004W-RF-8 (dB)	18	23	25	25	23	21	21	19
RMT2004W-RF-14 (dB)	18	20	20	20	20	20	20	18

**Tap Loss Tolerance**

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-500 MHz	N/A	± 1.0	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 2.0
501-600 MHz	N/A	± 1.3	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 2.0
601-900 MHz	N/A	± 1.7	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 2.0
901-1002 MHz	N/A	± 2.0	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 2.0

**Output-to-Tap Isolation (Min)**

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-10 MHz	N/A	T	18	20	25	33	35	38	40	42
11-50 MHz	N/A	T	25	20	25	33	37	40	42	43
51-300 MHz	N/A	T	25	23	23	33	35	35	40	42
301-400 MHz	N/A	T	25	21	23	31	32	34	40	42
401-500 MHz	N/A	T	23	20	21	30	30	33	38	40
501-600 MHz	N/A	T	22	20	20	28	28	30	37	38
601-900 MHz	N/A	T	20	19	19	27	25	26	30	32
901-1002 MHz	N/A	T	18	18	18	25	24	25	27	31

## SPECIFICATIONS

RMT2008-RF-XX (XX Denotes Tap Value)

**1 GHz, 8-Way RF Only Wide Body Multi-Tap****Return Loss (In/Out/Tap, Min)**

Frequency (MHz)	5-10	11-20	21-400	401-500	501-600	601-700	701-900	901-1002
Return Loss (dB)	16	18	18	18	17	16	16	16
RMT2008-RF-11 (dB)	16	18	18	18	17	16	16	16

**Insertion Loss (Max)**

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-10 MHz	N/A	N/A	T	3.5	1.8	1.2	1.0	0.9	0.7	0.7
11-50 MHz	N/A	N/A	T	3.5	1.7	1.1	0.9	0.9	0.6	0.6
51-100 MHz	N/A	N/A	T	3.8	1.9	1.2	0.9	0.9	0.7	0.7
101-300 MHz	N/A	N/A	T	3.8	2.0	1.3	1.0	0.9	0.9	0.9
301-400 MHz	N/A	N/A	T	3.9	2.1	1.4	1.1	1.0	0.9	0.9
401-500 MHz	N/A	N/A	T	4.2	2.2	1.6	1.2	1.1	1.0	1.0
501-600 MHz	N/A	N/A	T	4.4	2.3	1.7	1.5	1.3	1.1	1.1
601-700 MHz	N/A	N/A	T	4.5	2.5	1.8	1.5	1.3	1.1	1.1
701-800 MHz	N/A	N/A	T	4.6	3.0	2.0	1.5	1.3	1.3	1.3
801-900 MHz	N/A	N/A	T	4.7	3.2	2.4	1.8	1.4	1.4	1.4
901-1002 MHz	N/A	N/A	T	4.9	3.6	2.9	2.1	1.7	1.7	1.7

**Tap-to-Tap Isolation (Min)**

Frequency (MHz)	5-10	11-20	21-400	401-500	501-600	601-700	701-900	901-1002
Tap-to-Tap (dB)	18	23	23	23	20	18	18	18

**Tap Loss Tolerance**

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-500 MHz	N/A	N/A	± 1.0	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5
501-600 MHz	N/A	N/A	± 1.3	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.8
601-900 MHz	N/A	N/A	± 1.8	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 1.5	± 2.0
901-1002 MHz	N/A	N/A	± 2.3	± 2.3	± 1.8	± 1.8	± 1.8	± 1.8	± 1.8	± 2.3

**Output-to-Tap Isolation (Min)**

Tap Value (dB)	4	8	11	14	17	20	23	26	29	32
5-10 MHz	N/A	N/A	T	18	20	26	35	35	38	40
11-50 MHz	N/A	N/A	T	25	20	26	35	37	40	42
51-300 MHz	N/A	N/A	T	25	23	23	35	35	35	42
301-400 MHz	N/A	N/A	T	25	21	23	35	33	34	42
401-500 MHz	N/A	N/A	T	23	20	21	33	33	33	40
501-600 MHz	N/A	N/A	T	22	20	20	32	32	30	39
601-900 MHz	N/A	N/A	T	20	19	19	30	28	26	30
901-1002 MHz	N/A	N/A	T	18	18	18	28	27	25	27

## GENERAL SPECIFICATIONS

EMI Shielding	100 dB Minimum
Power Rating	12 Amps ac, 60-90 Volts, 1-60 Hz
Hum Modulation @ 8 Amps; 90 V, 60 Hz	60 dB, up to 550 MHz
	55 dB, 550 MHz to 870 MHz
	50 dB, 870 MHz to 1002 MHz
Water Tight	15 PSI
<b>Pedestal Port Spacing</b>	
2 and 4 Narrow Body, in. (cm.)	1.5 (3.81) (Center to Center)
8-Way Wide Body, in. (cm.)	3.0 (7.62) (Center to Center)
<b>Physical Dimensions</b>	
Narrow Body (L x W x H) in. (cm)	3.75 x 3.5 x 2.5 (9.53 x 8.89 x 6.35)
Wide Body (L x W x H) in. (cm)	4.5 x 5.25 x 2.25 (11.43 x 13.33 x 5.72)
<b>Torque Specifications</b>	
Housing Closure Screws	20-30 in./lbs.
Center Conductor Seizure	7-10 in./lbs.
Port Plugs	10-15 in./lbs.
F-Ports	30-40 in./lbs.

## ORDERING INFORMATION

## Narrow Body Taps

2-Way ARRIS #	Mfg #	4-Way ARRIS #	Mfg #
251957	RMT2002-RF-4	251968	RMT2004-RF-8
251958	RMT2002-RF-8	251969	RMT2004-RF-11
251959	RMT2002-RF-11	251970	RMT2004-RF-14
251960	RMT2002-RF-14	251971	RMT2004-RF-17
251961	RMT2002-RF-17	251972	RMT2004-RF-20
251962	RMT2002-RF-20	251973	RMT2004-RF-23
251963	RMT2002-RF-23	251974	RMT2004-RF-26
251964	RMT2002-RF-26	251975	RMT2004-RF-29
251965	RMT2002-RF-29	251976	RMT2004-RF-32
251966	RMT2002-RF-32		

## Wide Body Taps

2-Way ARRIS #	Mfg #	4-Way ARRIS #	Mfg #	8-Way ARRIS #	Mfg #
251987	RMT2002W-RF-4	251998	RMT2004W-RF-8	251978	RMT2008-RF-11
251988	RMT2002W-RF-8	251999	RMT2004W-RF-11	251979	RMT2008-RF-14
251989	RMT2002W-RF-11	252000	RMT2004W-RF-14	251980	RMT2008-RF-17
251990	RMT2002W-RF-14	252001	RMT2004W-RF-17	251981	RMT2008-RF-20
251991	RMT2002W-RF-17	252002	RMT2004W-RF-20	251982	RMT2008-RF-23
251992	RMT2002W-RF-20	252003	RMT2004W-RF-23	251983	RMT2008-RF-26
251993	RMT2002W-RF-23	252004	RMT2004W-RF-26	251984	RMT2008-RF-29
251994	RMT2002W-RF-26	252005	RMT2004W-RF-29	251985	RMT2008-RF-32
251995	RMT2002W-RF-29	252006	RMT2004W-RF-32		
251996	RMT2002W-RF-32				

## RELATED PRODUCTS

Digital Return Transmitter	Optical Patch Cords
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SFPs	Optical Passives
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Fiber Service Cable	Installation Services
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**Note:** Specifications are subject to change without notice.

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