

# Regal® Taps

**RMT212\* – NARROW BODY TAPS**

**RMT212\*W – WIDE BODY TAPS**

**1.2 GHz FULL-FEATURE EQUALIZABLE TAPS**



## FEATURES

- Support DOCSIS® 3.1 expanded bandwidth up to 1218 MHz
- Improve network performance with signal conditioning plug-ins
- High quality RF connection with auto-seize F-connectors
- Maintain existing Regal installed base with compatible faceplate upgrades
- Faceplate only options for cost effective upgrades to existing Regal deployments
- High level of network resilience with 6kV surge resistance on feederline and F-ports
- Maintain feederline RF and AC connections with faceplate removed with integrated bypass capability



## PRODUCT OVERVIEW

The ARRIS Regal® RMT2120 1.2 GHz series equalizable taps offer improved return path performance for advanced two-way HFC systems while maintaining backward compatibility with the previous Regal installed base. In addition to mechanical backwards compatibility to existing Regal tap housings, we now offer faceplate only options for plant upgrades. The faceplate only option allows the technician to easily upgrade an existing location with a simple faceplate change. This solution provides significant product cost savings, as well as reduced shipment cost, by eliminating unneeded extra housings being built and shipped.

Additional improvements over the existing family of Regal 1 GHz taps include the ability for drop signal conditioning with optional plug-in, field configurable modules that include cable equalizers, return path attenuators, and cable simulators. These plug-ins allow for drop signal conditioning without affecting the main feederline path. The Regal 1.2 GHz taps also come equipped with an auto-seize F-connector which improves system reliability by providing increased drop center conductor clamping force and a greater surface/contact area over standard F-connectors.

RMT212\* - NARROW BODY SPECIFICATIONS MAXIMUM PERFORMANCE<sup>1</sup> (5-1218 MHz)

Insertion Loss (dB)	Nom. Tap Value	5 MHz Typ/Max	10 MHz Typ/Max	50 MHz Typ/Max	100 MHz Typ/Max	450 MHz Typ/Max	550 MHz Typ/Max	750 MHz Typ/Max	870 MHz Typ/Max	1000 MHz Typ/Max	1218 MHz Typ/Max
<b>MODEL NO. RMT2122 Narrow Body</b>											
RMT2122-RF-4	4.0	—	—	—	—	—	—	—	—	—	—
RMT2122-RF-8	8.5	3.3/3.9	3.2/3.6	3.1/3.5	3.4/3.6	3.9/4.2	4.0/4.2	4.1/4.4	4.0/4.5	3.9/4.6	4.6/5.2
RMT2122-RF-11	11.5	1.7/2.0	1.3/1.8	1.2/1.8	1.5/2.0	1.8/2.4	1.9/2.4	2.2/2.6	2.4/2.9	2.6/3.2	3.0/3.6
RMT2122-RF-14	14.5	0.9/1.3	0.7/1.2	0.7/1.2	0.9/1.3	1.2/1.6	1.2/1.8	1.4/1.8	1.5/2.0	1.7/2.3	2.0/2.7
RMT2122-RF-17	17.0	0.7/1.2	0.6/1.1	0.6/1.1	0.7/1.2	1.0/1.5	1.1/1.5	1.3/1.5	1.4/1.6	1.5/1.6	1.8/2.2
RMT2122-RF-20	20.0	0.5/1.0	0.4/0.9	0.3/0.9	0.6/1.0	0.8/1.3	0.9/1.4	1.1/1.5	1.2/1.6	1.3/1.6	1.7/2.0
RMT2122-RF-23	23.5	0.3/0.7	0.3/0.6	0.3/0.7	0.5/0.8	0.7/1.1	0.8/1.2	1.0/1.3	1.1/1.4	1.3/1.6	1.6/2.0
RMT2122-RF-26	26.0	0.4/0.7	0.3/0.6	0.3/0.7	0.5/0.8	0.7/1.1	0.8/1.2	0.9/1.3	1.0/1.4	1.2/1.6	1.6/2.0
RMT2122-RF-29	29.0	0.3/0.7	0.2/0.6	0.3/0.7	0.4/0.8	0.7/1.1	0.7/1.2	0.9/1.3	1.0/1.4	1.2/1.6	1.6/2.1

Insertion Loss (dB)	Nom. Tap Value	5 MHz Typ/Max	10 MHz Typ/Max	50 MHz Typ/Max	100 MHz Typ/Max	450 MHz Typ/Max	550 MHz Typ/Max	750 MHz Typ/Max	870 MHz Typ/Max	1000 MHz Typ/Max	1218 MHz Typ/Max
<b>MODEL NO. RMT2124 Narrow Body</b>											
RMT2124-RF-8	8.0	—	—	—	—	—	—	—	—	—	—
RMT2124-RF-11	11.5	3.4/3.9	3.3/3.6	3.2/3.5	3.5/3.6	4.0/4.2	4.0/4.4	4.1/4.5	4.0/4.6	4.0/4.7	4.8/5.3
RMT2124-RF-14	14.5	1.6/2.0	1.3/1.8	1.2/1.8	1.5/2.0	1.8/2.4	2.0/2.6	2.4/2.8	2.6/3.0	2.8/3.1	3.2/3.6
RMT2124-RF-17	17.0	0.9/1.3	0.7/1.2	0.7/1.2	0.9/1.3	1.2/1.7	1.3/1.9	1.6/1.9	1.8/2.1	1.9/2.4	2.4/2.7
RMT2124-RF-20	20.0	0.9/1.2	0.8/1.1	0.8/1.1	1.0/1.2	1.2/1.5	1.3/1.6	1.6/1.8	1.7/2.0	1.9/2.2	2.3/2.4
RMT2124-RF-23	23.0	0.5/1.0	0.4/0.9	0.4/0.9	0.6/1.0	0.8/1.3	0.9/1.4	1.1/1.5	1.3/1.6	1.4/1.7	1.8/2.0
RMT2124-RF-26	26.0	0.3/0.7	0.3/0.6	0.2/0.6	0.5/0.8	0.6/1.1	0.7/1.2	0.9/1.3	1.0/1.4	1.2/1.5	1.7/2.0
RMT2124-RF-29	29.0	0.3/0.7	0.3/0.6	0.2/0.6	0.4/0.8	0.6/1.1	0.7/1.2	0.9/1.3	1.0/1.4	1.2/1.6	1.7/2.2

**Note:**

<sup>1</sup> The RMT212\* is shipped standard with a jumper (T-JP) installed into the plug-in module sockets.

RMT212\*W - WIDE BODY SPECIFICATIONS MAXIMUM PERFORMANCE<sup>1</sup> (5-1218 MHz)

Insertion Loss (dB)	Nom. Tap Value	5 MHz Typ/Max	10 MHz Typ/Max	50 MHz Typ/Max	100 MHz Typ/Max	450 MHz Typ/Max	550 MHz Typ/Max	750 MHz Typ/Max	870 MHz Typ/Max	1000 MHz Typ/Max	1218 MHz Typ/Max
<b>MODEL NO. RMT2122 Wide Body</b>											
RMT2122W-RF-4	4.0	—	—	—	—	—	—	—	—	—	—
RMT2122W-RF-8	8.5	3.8/3.9	3.3/3.6	3.2/3.5	3.5/3.6	3.8/4.2	3.9/4.3	3.9/4.4	3.9/4.5	3.8/4.6	4.1/5.2
RMT2122W-RF-11	11.5	1.8/2.0	1.3/1.8	1.2/1.8	1.4/2.0	1.7/2.4	1.8/2.4	2.1/2.6	2.2/2.9	2.4/3.2	3.1/3.6
RMT2122W-RF-14	14.5	0.9/1.3	0.8/1.2	0.7/1.2	1.0/1.3	1.2/1.6	1.2/1.8	1.4/1.8	1.5/2.0	1.8/2.3	2.2/2.7
RMT2122W-RF-17	17.0	0.9/1.2	0.8/1.1	0.7/1.1	1.0/1.2	1.1/1.5	1.2/1.5	1.3/1.5	1.4/1.6	1.5/1.6	1.6/2.2
RMT2122W-RF-20	20.0	0.5/1.0	0.4/0.9	0.4/0.9	0.6/1.0	0.8/1.3	0.8/1.4	0.9/1.5	1.0/1.6	1.1/1.6	1.4/2.0
RMT2122W-RF-23	23.5	0.4/0.7	0.3/0.6	0.3/0.7	0.5/0.8	0.7/1.1	0.7/1.2	0.9/1.3	0.9/1.4	1.1/1.6	1.4/2.0
RMT2122W-RF-26	26.0	0.4/0.7	0.3/0.6	0.3/0.7	0.6/0.8	0.7/1.1	0.7/1.2	0.9/1.3	1.0/1.4	1.1/1.6	1.4/2.0
RMT2122W-RF-29	29.0	0.4/0.7	0.3/0.6	0.3/0.7	0.5/0.8	0.7/1.1	0.7/1.2	0.8/1.3	0.9/1.4	1.1/1.6	1.4/2.1

Insertion Loss (dB)	Nom. Tap Value	5 MHz Typ/Max	10 MHz Typ/Max	50 MHz Typ/Max	100 MHz Typ/Max	450 MHz Typ/Max	550 MHz Typ/Max	750 MHz Typ/Max	870 MHz Typ/Max	1000 MHz Typ/Max	1218 MHz Typ/Max
<b>MODEL NO. RMT2124 Wide Body</b>											
RMT2124W-RF-8	8.0	—	—	—	—	—	—	—	—	—	—
RMT2124W-RF-11	11.5	3.8/3.9	3.3/3.6	3.2/3.5	3.5/3.6	3.9/4.2	3.9/4.4	3.9/4.5	3.8/4.6	3.8/4.7	4.0/5.3
RMT2124W-RF-14	14.5	1.6/2.0	1.3/1.8	1.2/1.8	1.4/2.0	1.8/2.4	2.0/2.6	2.4/2.8	2.6/3.0	2.8/3.1	3.3/3.6
RMT2124W-RF-17	17.0	0.9/1.3	0.7/1.2	0.7/1.2	0.9/1.3	1.1/1.7	1.3/1.9	1.5/1.9	1.7/2.1	1.9/2.4	2.3/2.7
RMT2124W-RF-20	20.0	0.7/1.2	0.6/1.1	0.5/1.1	0.7/1.2	0.9/1.5	1.0/1.6	1.2/1.8	1.3/2.0	1.4/2.2	1.6/2.4
RMT2124W-RF-23	23.0	0.5/1.0	0.4/0.9	0.4/0.9	0.5/1.0	0.7/1.3	0.8/1.4	1.0/1.5	1.0/1.6	1.1/1.7	1.4/2.0
RMT2124W-RF-26	26.0	0.4/0.7	0.3/0.6	0.3/0.6	0.5/0.8	0.6/1.1	0.7/1.2	0.9/1.3	0.9/1.4	1.0/1.5	1.3/2.0
RMT2124W-RF-29	29.0	0.4/0.7	0.3/0.6	0.3/0.6	0.5/0.8	0.7/1.1	0.7/1.2	0.9/1.3	1.0/1.4	1.0/1.6	1.4/2.2

Insertion Loss (dB)	Nom. Tap Value	5 MHz Typ/Max	10 MHz Typ/Max	50 MHz Typ/Max	100 MHz Typ/Max	450 MHz Typ/Max	550 MHz Typ/Max	750 MHz Typ/Max	870 MHz Typ/Max	1000 MHz Typ/Max	1218 MHz Typ/Max
<b>MODEL NO. RMT2128 Narrow Body</b>											
RMT2128-RF-11	11.0	—	—	—	—	—	—	—	—	—	—
RMT2128-RF-14	14.5	3.7/3.9	3.3/3.6	3.2/3.5	3.4/3.7	3.7/4.2	3.8/4.4	3.8/4.5	3.8/4.5	3.7/4.5	3.8/5.2
RMT2128-RF-17	17.5	1.6/2.0	1.3/1.8	1.2/1.8	1.5/2.0	1.7/2.4	1.9/2.6	2.3/2.8	2.4/2.9	2.6/3.1	3.3/3.6
RMT2128-RF-20	20.5	1.1/1.3	0.9/1.2	0.9/1.2	1.1/1.3	1.3/1.7	1.3/1.9	1.5/1.9	1.6/2.1	1.7/2.3	2.0/2.8
RMT2128-RF-23	23.5	0.7/1.1	0.6/0.9	0.5/0.9	0.7/1.1	0.9/1.3	1.0/1.5	1.2/1.6	1.2/1.8	1.3/2.0	1.6/2.2
RMT2128-RF-26	26.5	0.5/0.9	0.4/0.8	0.4/0.8	0.6/0.8	0.8/1.2	0.8/1.4	1.0/1.4	1.1/1.4	1.1/1.6	1.5/2.0
RMT2128-RF-29	29.5	0.4/0.7	0.3/0.6	0.3/0.6	0.5/0.6	0.7/1.2	0.7/1.2	0.9/1.3	1.0/1.5	1.1/1.8	1.4/2.3

**Note:**

<sup>1</sup> The RMT212\* is shipped standard with a jumper (T-JP) installed into the plug-in module sockets.

## SPECIFICATIONS TAP TO OUTPUT ISOLATION, NOMINAL

MODEL NUMBER - 2 Way	5-9 MHz	10-85 MHz	86-204 MHz	205-749 MHz	750-899 MHz	900-1218 MHz
RMT2122(W)-RF-4	—	—	—	—	—	—
RMT2122(W)-RF-8	20	25	21	21	20	20
RMT2122(W)-RF-11	20	25	22	22	20	20
RMT2122(W)-RF-14	22	26	26	26	23	22
RMT2122(W)-RF-17	25	30	30	30	28	25
RMT2122(W)-RF-20	29	33	33	31	30	29
RMT2122(W)-RF-23	32	36	36	34	33	31
RMT2122(W)-RF-26	34	38	38	36	35	33
RMT2122(W)-RF-29	38	40	40	39	37	35

MODEL NUMBER - 4 Way	5-9 MHz	10-85 MHz	86-204 MHz	205-749 MHz	750-899 MHz	900-1218 MHz
RMT2124(W)-RF-8	—	—	—	—	—	—
RMT2124(W)-RF-11	20	25	23	23	22	21
RMT2124(W)-RF-14	22	27	27	27	25	24
RMT2124(W)-RF-17	26	28	28	28	26	25
RMT2124(W)-RF-20	29	33	33	33	32	29
RMT2124(W)-RF-23	31	35	35	35	34	31
RMT2124(W)-RF-26	34	37	37	37	35	32
RMT2124(W)-RF-29	36	39	39	39	37	34

MODEL NUMBER - 8 Way	5-9 MHz	10-85 MHz	86-204 MHz	205-749 MHz	750-899 MHz	900-1218 MHz
RMT2128-RF-11	—	—	—	—	—	—
RMT2128-RF-14	23	25	25	25	25	22
RMT2128-RF-17	25	30	30	30	27	25
RMT2128-RF-20	28	32	32	31	28	27
RMT2128-RF-23	30	34	34	34	32	28
RMT2128-RF-26	34	36	36	36	34	29
RMT2128-RF-29	36	38	38	37	35	31

## SPECIFICATIONS

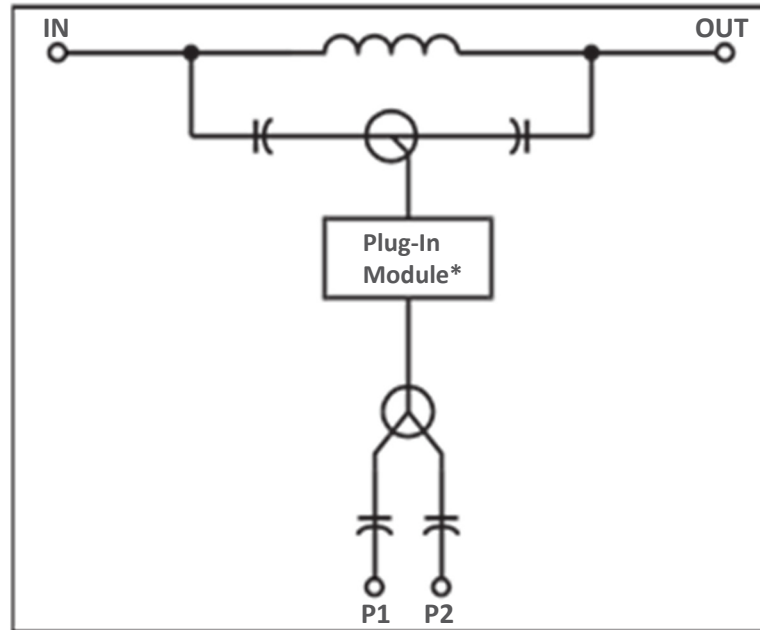
Tap Value	2-way (Narrow and Wide)	5 to 1000 MHz	± 2.0 dB
		1000 to 1218 MHz	± 2.5 dB
	4-way (Narrow and Wide)	5 to 1000 MHz	± 2.0 dB
		1000 to 1218 MHz	± 2.5 dB
	8-way	5 to 500 MHz	± 2.0 dB
		500 to 1000 MHz	± 3.0 dB
1000 to 1218 MHz		± 3.5 dB	
Tap to Tap Isolation		5 – 9 MHz	20 dB
		10 – 85 MHz	25 dB
		86 – 204 MHz	25 dB
		205 – 749 MHz	23 dB
		750 – 1218 MHz	20 dB
Return Loss: Tap Ports		5 – 9 MHz	16 dB
		10 – 749 MHz	16 dB
		750 – 1000 MHz	16 dB
		1001 – 1218 MHz	16 dB
Return Loss: In/Out Ports		5 – 9 MHz	16 dB
		10 – 204 MHz	16 dB
		205 – 749 MHz	16 dB
		750 – 1218 MHz	16 dB

## SPECIFICATIONS

Power Passing	12 Amperes Maximum (60/90 volts)
Surge: In/Out and F-Port	6 kV Combination/Ring Wave
Hum Modulation (10 Amperes) <sup>2</sup>	
5 – 10 MHz	60 dB Minimum
11 – 750 MHz	65 dB Minimum
751 – 1000 MHz	60 dB Minimum
1001 – 1218 MHz	53 dB Minimum
RFI	100 dB minimum
Operating Temperature	-40°C to +60°C
RoHS Certification	6/6
<b>Physical Attributes</b>	
Narrow Body (W x H x D) in.	3.75 x 4.0 x 3.0 (Includes port plugs and strand clamp/bolt assembly)
Wide Body (W x H x D) in.	5.5 x 4.5 x 3.0 (Includes port plugs and strand clamp/bolt assembly)
Weight	Narrow Body – 1.0 lb. Wide Body – 1.5 lb.

**Note:**<sup>2</sup> Typical

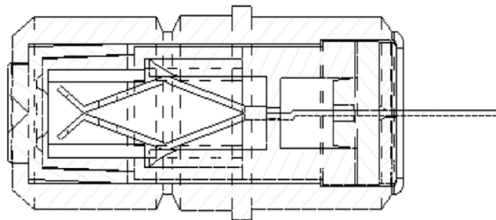
## RMT212\* Tap Block Diagram



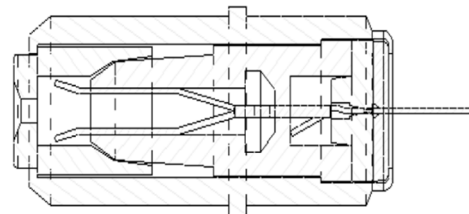
*\*Plug-In Module may be T-JP, T-EQ-\*-Q, T-RPA/\*-Q, or T-CS-\*-Q. Block Diagram shown is for a 2-port tap. The 4-port and 8-port taps will have additional splitters after the plug-in module.*

## RMT212\* Auto-Seize Connector

Conventional F-Connector Design



Auto-Seize Series F-Connector Design



## 2-Way Ordering Information

## Narrow Body Taps

Complete Tap Part Number	Model Number	Faceplate Only Part Number	Model Number
1509870-001	RMT2122-RF-4	1509875-001	RMT2122-RF-4/U
1509870-002	RMT2122-RF-8	1509875-002	RMT2122-RF-8/U
1509870-003	RMT2122-RF-11	1509875-003	RMT2122-RF-11/U
1509870-004	RMT2122-RF-14	1509875-004	RMT2122-RF-14/U
1509870-005	RMT2122-RF-17	1509875-005	RMT2122-RF-17/U
1509870-006	RMT2122-RF-20	1509875-006	RMT2122-RF-20/U
1509870-007	RMT2122-RF-23	1509875-007	RMT2122-RF-23/U
1509870-008	RMT2122-RF-26	1509875-008	RMT2122-RF-26/U
1509870-009	RMT2122-RF-29	1509875-009	RMT2122-RF-29/U

## Wide Body Taps

Complete Tap Part Number	Model Number	Faceplate Only Part Number	Model Number
1509872-001	RMT2122W-RF-4	1509877-001	RMT2122W-RF-4/U
1509872-002	RMT2122W-RF-8	1509877-002	RMT2122W-RF-8/U
1509872-003	RMT2122W-RF-11	1509877-003	RMT2122W-RF-11/U
1509872-004	RMT2122W-RF-14	1509877-004	RMT2122W-RF-14/U
1509872-005	RMT2122W-RF-17	1509877-005	RMT2122W-RF-17/U
1509872-006	RMT2122W-RF-20	1509877-006	RMT2122W-RF-20/U
1509872-007	RMT2122W-RF-23	1509877-007	RMT2122W-RF-23/U
1509872-008	RMT2122W-RF-26	1509877-008	RMT2122W-RF-26/U
1509872-009	RMT2122W-RF-29	1509877-009	RMT2122W-RF-29/U

## 4-Way Ordering Information

## Narrow Body Taps

Complete Tap Part Number	Model Number	Faceplate Only Part Number	Model Number
1509871-001	RMT2124-RF-8	1509876-001	RMT2124-RF-8/U
1509871-002	RMT2124-RF-11	1509876-002	RMT2124-RF-11/U
1509871-003	RMT2124-RF-14	1509876-003	RMT2124-RF-14/U
1509871-004	RMT2124-RF-17	1509876-004	RMT2124-RF-17/U
1509871-005	RMT2124-RF-20	1509876-005	RMT2124-RF-20/U
1509871-006	RMT2124-RF-23	1509876-006	RMT2124-RF-23/U
1509871-007	RMT2124-RF-26	1509876-007	RMT2124-RF-26/U
1509871-008	RMT2124-RF-29	1509876-008	RMT2124-RF-29/U

## Wide Body Taps

Complete Tap Part Number	Model Number	Faceplate Only Part Number	Model Number
1509873-001	RMT2124W-RF-8	1509878-001	RMT2124W-RF-8/U
1509873-002	RMT2124W-RF-11	1509878-002	RMT2124W-RF-11/U
1509873-003	RMT2124W-RF-14	1509878-003	RMT2124W-RF-14/U
1509873-004	RMT2124W-RF-17	1509878-004	RMT2124W-RF-17/U
1509873-005	RMT2124W-RF-20	1509878-005	RMT2124W-RF-20/U
1509873-006	RMT2124W-RF-23	1509878-006	RMT2124W-RF-23/U
1509873-007	RMT2124W-RF-26	1509878-007	RMT2124W-RF-26/U
1509873-008	RMT2124W-RF-29	1509878-008	RMT2124W-RF-29/U

## 8-Way Ordering Information

Wide Body Taps<sup>3</sup>

Complete Tap Part Number	Model Number	Faceplate Only Part Number	Model Number
1509874-001	RMT2128-RF-11	1509879-001	RMT2128-RF-11/U
1509874-002	RMT2128-RF-14	1509879-002	RMT2128-RF-14/U
1509874-003	RMT2128-RF-17	1509879-003	RMT2128-RF-17/U
1509874-004	RMT2128-RF-20	1509879-004	RMT2128-RF-20/U
1509874-005	RMT2128-RF-23	1509879-005	RMT2128-RF-23/U
1509874-006	RMT2128-RF-26	1509879-006	RMT2128-RF-26/U
1509874-007	RMT2128-RF-29	1509879-007	RMT2128-RF-29/U

**Note:**

<sup>3</sup> 8 Port taps only come in the wide body housing.

## RELATED PRODUCTS

RL12 Regal® System Passives      RF Amplifiers

T\*-Q 1.2 GHz Tap Plug-ins      Optical Nodes

**Note:** Specifications are subject to change without notice.

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