

TJA4 SERIES Auto-tunable combiner, 763-869 MHz

- Fully automated in detecting and tuning each channel to Tx frequency for flexible applications
- Comprehensive remote alarm monitoring
- Minimum Tx-Tx frequency spacing of 250kHz and wide tuning range
- Low insertion loss and high isolation

The new TJA series combiner features an integrated control unit for fully autonomous frequency tuning to keep return loss to a minimum and optimize overall performance. This allows the combiner to be used in unconventional ways to satisfy customers' unique needs.

The TJA combiner is designed with high unloaded quality factor, wide tuning range, high linearity, high power handling, low weight, compact dimension, and outstanding reliability. Remote control and system monitoring are supported via Ethernet/IP connection.

The compact design of the cavity filters makes the 2-channel module easily fit into a standard 4U high, 19-inch rack. Specifically, the TJA4 series covers 763-776 and 851-869 MHz and comes in 2, 4, 6, or 8 channel configurations. Higher channel numbers are available, please call for details.



2 channel model shown

Key features:

- * Quick tuning time: 10 seconds for each channel (typical)
- * Wide tuning range: 20 MHz (5 MHz for 4 channel and up)
- * Outstanding tuning accuracy: +/- 15 kHz
- * Comprehensive remote alarm monitoring including frequency, power, return loss, as well as antenna Tx power and VSWR of each carrier.
- * Tx-Tx spacing down to 250 kHz
- * User-friendly web-based GUI
- * Secure user administration with RBAC feature to manage users and their access rights

Region	United States	Europe, Middle East, and Africa	Canada, Caribbean, and Latin America	Asia-Pacific
Telephone	1 800 263 3275	+1 905 727 0165 ext. 232	Canada: 1 905 726 7676 International: +1 905 726 7676	+1 905 727 0165 ext. 287
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Product Specification Sheet		TJA4	Issue 2.0	Dated: 10-13-2023

Electrical										
Channel	2 CH		4 CH		6 CH		8 CH		Note	
Part number	TJA4232-1	TJA4232-2	TJA4234-1	TJA4234-2	TJA4236-1	TJA4236-2	TJA4238-1	TJA4238-2		
Frequency range (MHz)	763-776	851-869	763-776	851-869	763-776	851-869	763-776	851-869		
Tuning range (MHz)	13	18	5	5	5	5	5	5		
Automatic Tx frequency detection	Yes									
Automatic re-tuning	Yes									
VSWR	Input	< 1.25 : 1								
	Output	< 2.0 : 1								
Insertion loss, Tx to Ant	≤ 3.9 dB		≤ 4.9 dB		≤ 5.5 dB		≤ 6 dB			
Frequency separation	Max	See above Tuning Range								
	Min	250 kHz								
Isolation (Min)	Tx to Tx	65 dB								
	Ant to Tx	55 dB								
Input power per channel	25 to 125 Watt									
Networking interface	RJ45									
Connector	Input	N-female ¹								See below
	Output	N-female ¹								
Power supply voltage	12 VDC ²									
Mechanical										
Width	19" (483mm)									
Depth	22.2" (564mm) ³									See below
Height	7" (178mm)	14" (356mm)		21" (533mm)		28" (686mm)				
Weight	29.5 lbs (13.4kg)	59.5 lbs (27kg)		89 lbs (40.4kg)		119 lbs (54kg)				
Shipping dimensions	30 x 22.5 x 11 in	30 x 22.5 x 18 in		Two packages: one 30 x 22.5 x 11 in; one 30 x 22.5 x 18 in		Two packages, each 30 x 22.5 x 18 in				
Total shipping weight	56 lbs (25.4kg)	95 lbs (43kg)		152 lbs (69kg)		190 lbs (86kg)				
Mounting	EIA 19" rack									
Operational Temperature range	-22 to +140 °F (-30 to +60 °C)									

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Note

1. Other options available, call for details.
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3. Excluding connector & harness
4. **Specify the exact frequency range when ordering.**

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