# Waveguide Cavity-Ferrite Transmitter Combiner, 851-869 MHz, 8 Channel

## Product Description

These extremely compact combiners use a "shared wall" waveguide cavity assembly with an integrated antenna port junction, in combination with a dual isolators for each channel. The isolators have integrated loads. Each isolator has a built-in sampling port to allow measurements of reflected power, particularly useful when retuning the combiner. A patented temperature compensation scheme gives these combiners excellent frequency stability over the complete operating temperature and power ranges. The WIJD862-02S model is recommended for field expansion only.



2 Units Harnessed Together

WIJD862 Series

### Features/Benefits

Low loss – Maximizes system performance.

- High isolation Minimizes possibility of intermodulation.
- · Modular Compact design minimizes rack-mounting footprint.
- Fully temperature compensated Ensures consistent performance across temperature and power range.
- Expandable Up to 20 channels. Technical Specification

Product Type	Waveguide	
Application	Trunking, SMR	
Number of Channels	8	
Input Power/Channel Range, Watts	60 to 150	
Minimum Channel Spacing, kHz	150	
End-Mount (Yes/No)	Yes	
Frequency Range, MHz	851-869	
Reflected Power, Max. Allowable from Ant., Watts	150	
Bandwidth, MHz	18	
Separation, Min., kHz	150	
Isolation, Min. Tx-Tx, dB	60	
Isolation, Min. AntTx., dB	50	
Insertion Loss, Max. per Channel, dB	4.7	
Channel Separation for Specifications Given, kHz	150	
Continuous Power Input, Max. per Channel, Watts	150	
Input Return Loss, Min., dB	19.0	
Output Return Loss, Min., dB	8.5	
Connectors - Input	N-Female	
Connectors - Output	7-16 DIN-Female	
Connectors - Sampling Port	BNC-Female	
Sampling Port Coupling, dB	35+/-5	
Temperature Range, °C (°F)	-30 to +60 (-22 to +140)	
Height, mm (in)	356 (14)	
Width, mm (in)	483 (19)	
Depth, mm (in)	436 (17-5/32)	
Mounts in 19" (483mm) EIA Rack (Yes/No)	Yes	
Weight, kg (lb)	61.7 (136)	
Harness Kit	Use HRNWIJD862-DUAL or HRNWIJD862-Quad for expansion	
Ant Conn	7-16 DIN	
Harness Kit Capability	Connects a third WIJD862 to the existing WIJD862 module pair	

# Notes

#### Other Documentation

RFS The Clear Choice ®	WIJD862-08S	Rev: A / 2012-03-	Print Date: 30.01.2013
	WIJD002-003	01T00:00:00.000	
Please visit us on the internet at http://www.rfsw	orld com/		Radio Frequency Systems

Waveguide Cavity-Ferrite Transmitter Combiner, 851-869 MHz, 8 Channel

RFS The Clear Choice ®	WIJD862-08S	Rev: A / 2012-03-	Print Date: 30.01.2013
	WIJD002-003	NOV. A / 2012-00-	1 mil Dute. 00.01.2010
		01T00:00:00.000	
Blasse visit up on the internet at http://www.rfow	(orld com/		Bodio Eroqueney Systems

