

42-57D-05 Series Receive Multicouplers



TX RX Systems Receive Multicouplers are a key component in an efficient received-signal distribution system. The Receive Multicouplers amplify signals and then split them to the requisite number of output ports. The design has been optimized to handle strong signals without overloading, while maintaining a good noise figure.



FEATURES

- ▶ Quadrature coupled low noise amplifier that provides multiple levels of redundancy to ensure continuous operation.
- ▶ A test port is located on the front panel for easy access to allow for non-intrusive testing and benchmarking.
- ▶ Expandable from 8 to 16 ports. Contact TX RX Systems for custom configurations beyond 16 ports.
- ▶ Amplifier current fault monitoring is provided and is annunciated through a form-C output alarm contact that can be integrated into an external alarm system.
- ▶ Gain is easily adjustable in increments of 1dB through an electronic attenuator.
- ▶ Additional filtering can be provided externally by connecting to the preselector input and output ports that are provided.
- ▶ Complies with R56 grounding requirements.

SPECIFICATIONS

Frequency Range	380-512 MHz
System Gain	See Model Matrix
Amplifier Type	Quadrature Coupled
Amplifier Noise Figure	< 1.5 dB
Amplifier OIP3	> +40dBm
Number of Output Ports	See Model Matrix
RF Port Return Loss	> 14 dB
Test Port Coupling	-30dB
Antenna Connector	N-female
Receiver Connector	See Model Matrix
Test Port Connector	BNC-female
Rx-Rx Port Isolation (Min)	> 20 dB
Total Power Dissipation	5 Watts
Attenuator Setting	15 dB in 1 dB steps
Alarm Contacts	Form-C Contacts
Power Requirements	See Model Matrix
Operating Temperature	0°-50°C
Enclosure	Standard EIA 19" Rack
Dimensions (HWD)	See Model Matrix
Net Weight	9 lbs

TX RX Systems Inc.

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MODEL MATRIX

MODEL NUMBERS	NUMBER OF PORTS	SYSTEM GAIN (MAX)*	POWER REQUIREMENTS	RECEIVE CONNECTORS	DIMENSIONS
42-57D-05-08N	8	15 dB	85-264 VAC	N	1RU x 19" x 14"
42-57D-05-08N-48	8	15 dB	-48 VDC	N	1RU x 19" x 14"
42-57D-05-08B	8	15 dB	85-264 VAC	BNC	1RU x 19" x 14"
42-57D-05-08B-48	8	15 dB	-48 VDC	BNC	1RU x 19" x 14"
42-57D-05-16N	16	12 dB	85-264 VAC	N	2RU x 19" x 14"
42-57D-05-16N-48	16	12 dB	-48 VDC	N	2RU x 19" x 14"
42-57D-05-16B	16	12 dB	85-264 VAC	BNC	1RU x 19" x 14"
42-57D-05-16B-48	16	12 dB	-48 VDC	BNC	1RU x 19" x 14"

* Electronic Attenuator (0~15 dB range) in each unit can be used to reduce system gain for optimal performance.

EXPANSION KITS

MODEL NUMBERS	DESCRIPTION	RECEIVE CONNECTORS
75-05-08N	8 to 16 Port Expansion Kit, N	N
75-05-08B	8 to 16 Port Expansion Kit, BNC	BNC



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