

RECEIVER MULTICOUPLER

698-960MHz

7/8/900MHz 8-Way Expandable Receiver Multicoupler

RX6996-3408-31



The RX6996-3408-31 is a broadband and expandable high performance receiver multicoupler (Rx Mux). Used in both analogue and digital radio systems the receiver multicoupler utilises a low-noise, high 3OIP, redundant quadrature amplifier (LNA) design to enhance base station receiver performance. Outputs are provided for up to eight (8) receivers and an optional output to feed an expansion multicoupler. Expansion configurations are detailed in our Receiver Multicoupler Application Note. An "Auto-Gain" feature compensates net system gain to maintain optimum system performance during a partial LNA failure. The operating gain can be manually programmed via rotary switches or configured via the comms port.

Features:

- Low Noise Figure LNA offering excellent 3OIP performance
- Auto-gain feature automatically restoring net system gain during partial amplifier failure
- Compatible with both analogue and digital technologies
- Manual or programmable gain setting
- Integral status monitoring and alarm outputs
- Three broadband models are available covering VHF, UHF and 7/8/900MHz frequency ranges.
- Facilitates easy expansion



FRONT VIEW



REAR VIEW

Model Number	RX6996-3408-31
Frequency Range	698-960MHz
Extended Frequency Range	698-960MHz
Gain Range	RF Outputs 1-8 = 0-15dB (typ) Expansion Outputs 9-16 = 0-15dB (typ) Expansion Outputs 17-128 = 0-5dB (typ)
Gain Setting Accuracy	+/-1dB
Gain Flatness	+/-1dB
Gain Step Size	1dB
RF Noise Figure	2 dB (typ)
Impedance	50 Ohms
Input Return Loss	> 14dB
Output Return Loss	> 14dB
Output Port Isolation	> 20dB
Amplifier 3OIP	44 dBm (min)
Maximum Input Level	0 dB
DC Supply	+11 to +16VDC
DC Current Drain	700mA (typ) @ 12VDC
Reverse polarity protection	Yes
Options	18-36VDC, 36-60VDC or 100-240VAC Power Supply
Alarm Output	N.O./N.C. Dry Relay Contacts 1A @ 60 V rating
Alarm Conditions	Amp # 1 quiescent operation outside tolerance Amp # 2 quiescent operation outside tolerance. Input Voltage outside tolerance Internal DC supplies outside tolerance
Connectors	RF - N (F) DC - 2-pin Pheonix Alarms - 3-pin Pheonix USB Comms - USB Type B
Temperature Range	-30°C to +60°C / 22° F to 140° F
Earthing	M5 Earthing screw and M6 Earthing Stud.
Surge Protection	Internal gas filled surge absorber at RF input.
Mechanical Dimensions	483x120x44mm / 19x4.72x1.73" (incl conn) 1RU 19" rack mount
Weight	1.8kg / 4lbs
Shipping	Supplied with DC and Alarms connector mating plugs, N termination for Expansion Port, Quick Start Guide and USB stick containing USB drivers and User Manual

*All specifications shown are for Frequency Range 698-960MHz operation.

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ORDERING INFORMATION

Model Number	DESCRIPTION
RX6996-3408-31	Receiver Multicoupler 698-960MHz 8-way with exp port. +11 to +16VDC
RX6996-3408-31-24	Receiver Multicoupler 698-960MHz 8-way with exp port. 18 to 36VDC
RX6996-3408-31-48	Receiver Multicoupler 698-960MHz 8-way with exp port. 36 to 60VDC
RX0000-3000-AC	AC Power Supply (external) 110-240V AC Input to 12V DC output with polarised 2 Pin Pheonix connector
RX0696-3008-31	Broad Band 60-960MHz Expansion Multicoupler 8-way

Refer to RFI Receiver Multicoupler Application Note.

Note: To expand this product to between 8 and 128 output ports, a broadband 8-Way Expansion Multicoupler (RX0696-3008-31) can be used in various configurations. Refer to RFI Receiver Multicoupler Application Note.