

# Receiver Multicoupler

380-520MHz (220-550MHz)  
RX3852-3408-31



The RX3852-3408-31 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, redundant quadrature amplifier (LNA) design to enhance base station receiver performance.

Outputs are provided for up to eight receivers and an optional output to feed an expansion multicoupler using N(f) connectors on all ports. The unit is supplied in a 1RU 19" rack mount housing for convenience of installation. Expansion configurations are detailed in the Receiver Multicoupler Application Note.



## 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
- Facilitates easy expansion

## Technical Specifications

Model Number	RX3852-3408-31	
Frequency range MHz	380-520	
Extended Frequency Range MHz	220-550*	
Gain Range (Typical) dB	RF Outputs 1-8 = 0 - 15 Expansion Outputs 9-16 = 0 - 15 Expansion Outputs 17-128 = 0 - 5	
Gain Setting Accuracy dB	+/-1	
Gain Flatness dB	+/-1	
Gain Step Size dB	1	
RF Noise Figure (Typical) dB	2	
Impedance Ohms	50	
Input Return Loss (Minimum) dB	14	
Output Return Loss (Minimum) dB	14	
Output Port Isolation (Minimum) dB	>20	
Amplifier 3OIP (Minimum) dBm	44	
Maximum Input Level dBm	0	
Power Options	+11-+16VDC, 18-36VDC, 36-60VDC or 100-240VAC Power Supply	
DC Current Drain	700mA (typ.) @ 12VDC	
Reverse polarity protection	Yes	
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 Phoenix Alarms - 3-pin Phoenix USB Comms - USB Type B	
Operational temperature range C / F	-30° to +60° / -22° to 140°	
Earthing	M5 Earthing screw and M6 Earthing Stud	
Surge Protection	Internal gas filled surge absorber at RF input	
Net Dimensions (incl connectors) mm / in	H	44 / 1.73
	W	483 / 19
	D	120 / 4.72
Weight (maximum) Kg / lb	1.8 / 4	
Shipping	Supplied with DC and Alarms connector mating plugs, N termination for Expansion Port	
Compliance	RoHS	

\*All specifications shown are for 380-520MHz operations.

Model Number	Description
RX3852-3408-31	Receiver Multicoupler 380-520MHz (220-550MHz) 8-way with exp port. +11 to +16VDC
RX3852-3408-31-24	Receiver Multicoupler 380-520MHz (220-550MHz) 8-way with exp port. 18 to 36VDC
RX3852-3408-31-48	Receiver Multicoupler 380-520MHz (220-550MHz) 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 Phoenix connector
RX0696-3008-31	Broadband 60-960MHz Expansion Multicoupler, 8-way

*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.*