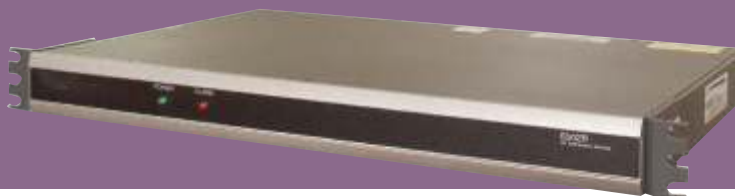


6502B

RF Distribution Module



The Microchip 6502B distribution module is a 10-channel RF distribution amplifier packaged in a 1U rack mount chassis. The 6502B is comprised of 10, low-phase-noise RF amplifiers that maintain high channel isolation (>100 dB). Up to 10 units can be daisy chained together to provide up to 100 outputs. For maximum expansion, each output of one unit can be used as a source for other 6502B units to provide almost infinite expansion capability with virtually no signal degradation.

The 6502B standard configuration accepts input frequencies from 0.1 MHz to 10 MHz at 1 Vrms amplitude and provides 10 buffered outputs. Each output and input has an alarm indicator that warns of either a loss of signal or insufficient amplitude.

Specifications

Stability	
RF output (ten)	
Frequency: 0.1 to 10 MHz	
• Level: 1 Vrms (nominal)	
• Gain: 1 (nominal)	
• Harmonic distortion: <-40 dB	
• Non-harmonic signals: <-80 dB	
• Load impedance: 50Ω	
• Isolation: >100 dB	
• Connectors: BNC	
Additive SSB phase noise	
Bandwidth	Offset from Carrier
1 Hz	-120 dB
10 Hz	-135 dB
100 Hz	-145 dB
1 kHz	-155 dB
10 kHz	-160 dB
RF input	
Frequency: 0.1 to 10 MHz	
Level: 1 Vrms (nominal)	
Impedance: 50Ω or Unterminated	

KEY FEATURES

- Low phase noise
- High channel isolation
- 10-channel output distribution
- Daisy chain for more than 100 outputs

Alarm output

- Summary alarm indicates failure of any output signal.
- Each output and main: Red LED
- Non-alarm condition: Relay energized (fail safe) C Form contacts
- Alarm output disable: Panel switch
- Connector: 9-pin D-male

Controls and indicators

- Power: Green LED, power is: connected
- Alarm: Red LED, signal output: failure

Note: If input level is less than 10 dBm, specify low-alarm threshold version (-509)

Environmental and Physical Specifications	
Temperature	0 °C to 50 °C
Humidity	0 to 95% non-condensing
AC Input	(±10%): 100 to 120 Vac, <10W: 180 - 240 Vac, <10W
DC input (optional)	22V to 56 Vdc, <10W
Dimensions	Height: 1U (1.75 inches) (4.44 cm) Width: 19" (48.26 cm) Depth: 12" (30.48 cm) Weight: <5 lbs. (2.25 Kg)
MTBF	>500,000 hrs
Standards	
Safety	IEC 61010-1:2010/EN 61010-1:2010
EMC	EN61326-1 (2006) EMC Requirements for Measurement, Control and Laboratory Equipment, Class A EN61000-3-2 (2006) +A1+A2 Harmonic Current Emissions EN61000-3-3 (2008) Voltage Fluctuation and Flicker Emissions
RoHS	5/6
Ordering Information	
Part Number	Description
14364-101	6502B Standard Configuration
14364-104	6502B with option 509 Standard config with low level input threshold (0dbm)