

# 6502B

## RF Distribution Module



6502B RF Distribution Module

### Key Features

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

The Symmetricom® 6502B Distribution Module is a ten channel, RF distribution amplifier packaged in a 1U rack mount chassis. The 6502B is comprised of ten, low phase noise RF amplifiers that maintain high channel isolation (>100dB). Up to ten 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 0.1MHz to 10MHz at 1Vrms amplitude and provides ten buffered outputs. Each output and input has an alarm indicator that warns of either a loss of signal or insufficient amplitude.

# 6502B

## Specifications

### ELECTRICAL SPECIFICATIONS

- RF output (ten)
  - Frequency: 0.1 to 10 MHz
  - Level: 1 Vrms (nominal)
  - Gain: 1 (nominal)
  - Harmonic distortion: <-40dB
  - Non-harmonic signals: <-80dB
  - Load impedance: 50Ω
  - Isolation: >100dB
  - Connectors: BNC
- Additive SSB phase noise  
(1 Hz Bandwidth)      **Offset from carrier**
  - 1 Hz                      -120dB
  - 10 Hz                    -135dB
  - 100 Hz                   -145dB
  - 1,000 Hz                -155dB
  - 10,000 Hz              -160dB
- RF input
  - Frequency: 0.1 to 10 MHz
  - Level: 1 Vrms (nominal)
- Impedance: 50Ω or Unterminated
- Alarm output
  - Summary alarm indicates failure of any output signal.
  - Each output & main: Red LED
  - Non-alarm condition: Relay energized (fail safe)  
C Form contacts
  - Alarm output disable: Panel switch
  - Connector: 9 pin D-male
- Controls & indicators
  - Power: Green LED, power is connected
  - Alarm: Red LED, signal output failure

Please note: If input level is less than 10dBm specify low alarm threshold version (-509).

### ENVIRONMENTAL & PHYSICAL SPECIFICATIONS

- Temperature (operating): 0°C to 55°C
- Relative humidity: 0 to 95%, non-condensing
- Power requirements
  - AC input (±10%): 100 - 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

### ORDERING INFORMATION      **Part No.**

- 6502B Standard Configuration      14364-101
- 6502B with DC input                  14364-102
- 6502B with option 509                14364-104
- 6502B with option 509 and DC input 14364-105
- 6502B without alarm override switch 14364-106



Rear view