

# 4024B

## 1 GHz POWER AMPLIFIER



- **Input/Output Impedance**  
50 (Unbalanced) N-R Connector
- **Input Level**  
+ 10dBm (117dB  $\mu$  V) Rating
- **Output Level**  
+ 30dBm (137dB  $\mu$  V) Rating
- **Gain**  
More than 20dB  $\pm$  1dB (At the time of MGC operation)
- **Gain Stability**  
 $\pm$  1dB (At the time of AGC operation)
- **Group Delay Characteristics in Band**  
Within 2nSp-p at fo  $\pm$  20MHz
- **Spurious of outside Band**  
Less than - 60dBc
- **D/U Deterioration**  
Less than 15dB (At the time of QPSK signal 1W output)
- **BER Characteristics Deterioration**  
Less than 0.5dB (At the time of QPSK signal 1W output)

### General

This unit is the amplifier to be able to get 1W output that amplifies signal of IF band of 900MHz ~ 2400MHz for satellite broadcasting.

### Composition

Main Unit	..... 1
Dimensions	425(W) $\times$ 99(H) $\times$ 380(D) mm (Excluding projections)
Weight	Approx. 8 kg
Accessories	
Power Cable (Including 3pin 2pin converter)	..... 1
Rack Mount Adapter	..... 1set
Instruction Manual and Test Result Sheet	..... 1
Power Source	
Input Voltage Allowable Range	: AC90V ~ AC250V (50Hz/60Hz)
Power Consumption	: Approx. 60VA
Operating Environment	
Temperature	: + 5 ~ + 40
Humidity	: 45% ~ 85%RH (No dew generation)

### Rating

- **Input/Output Center Frequency**

4024B-001 :	900MHz ~ 2400MHz	1 wave of designated one.
4024B-002 :	950MHz ~ 1450MHz	
4024B-003 :	900MHz ~ 1650MHz	
	1650MHz ~ 2400MHz	Switching system by rear panel switch
4024B-004 :	900MHz ~ 1650MHz	
4024B-005 :	1650MHz ~ 2400MHz	
4024B-006 :	1000MHz ~ 2400MHz	
4024B-007 :	1650MHz ~ 2200MHz	
- **Frequency Response**

4024B-001 :	At 900MHz ~ 2400MHz	Within $\pm$ 1.0dB
4024B-002 :	At 950MHz ~ 1450MHz	Within $\pm$ 1.0dB
4024B-003 :	At 900MHz ~ 2400MHz	Within $\pm$ 2.0dB
4024B-004 :	At 900MHz ~ 1650MHz	Within $\pm$ 2.0dB
4024B-005 :	At 1650MHz ~ 2400MHz	Within $\pm$ 2.0dB
4024B-006 :	At 900MHz ~ 2400MHz	Within $\pm$ 3.0dB
4024B-007 :	At 1650MHz ~ 2200MHz	Within $\pm$ 1.0dB
- **Frequency Response within Band**

4024B-001 :	At fo $\pm$ 20MHz	Within $\pm$ 0.5dB
4024B-002 :	At fo $\pm$ 20MHz	Within $\pm$ 0.5dB
4024B-003 :	At fo $\pm$ 20MHz	Within $\pm$ 1.0dB
4024B-004 :	At fo $\pm$ 20MHz	Within $\pm$ 1.0dB
4024B-005 :	At fo $\pm$ 20MHz	Within $\pm$ 1.0dB
4024B-006 :	At fo $\pm$ 20MHz	Within $\pm$ 1.5dB
4024B-007 :	At fo $\pm$ 20MHz	Within $\pm$ 0.5dB
- **Harmonics**

4024B-001 :	Less than - 60dB
4024B-002 :	Less than - 40dB
4024B-003 :	Less than - 40dB
4024B-004 :	Less than - 40dB
4024B-005 :	Less than - 40dB
4024B-006 :	Less than - 30dB
4024B-007 :	Less than - 40dB