

# 4214A

1W UP CONVERTER

Digital TV development & production facilities



## Performance

- **Frequency Response Within Band**  
± 0.5dB
- **Group Delay Within Band**  
10nSp-p
- **Distortion**  
IM 3      Less than -55dBc @ + 27dBm/each
- **C/No**  
More than 125dBc/Hz @2MHz offset
- **Spurious**  
Less than - 60dB (Total power reference)
- **Phase Noise**  
Less than - 105dBc/Hz @20kHz Offset
- **Frequency Stability**  
Within ± 1kHz (F<sub>0</sub> 85MHz)  
Within ± 5ppm (F<sub>0</sub> 177MHz)
- **Output Level Stability**  
Within ± 1dB

## General

This unit is frequency converter that converts output signal of Eiden § 3313B 8 VSB MODULATOR to designated U.S. TV channel. In consideration of characteristics of VSB modulated wave, superior characteristics, such as frequency response, group delay characteristics, distortion characteristics and etc., are secured as compared with ordinary converter for TV.

Also, this unit has 1W output power (Average power), so that it is the most suitable for factory facilities.

## Composition

Main Unit .....	1
Dimensions	425(W) × 149(H) × 480(D) mm (Excluding projections)
Weight	Approx. 20 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. 230VA
Operating Environment	
Temperature	: +5 ~ + 40
Humidity	: 45% ~ 85%RH (No dew generation)

## Rating

### Input

- **Center Frequency**  
44MHz
- **Input Impedance**  
50 (BNC)
- **Input Level**  
- 10dBm ± 2dB
- **Signal Band Width**  
6MHz

### Output

- **Center Frequency**  
U.S. TV Channel  
One wave designated in 57MHz ~ 887MHz
- **Output Impedance**  
50 (N)
- **Output Level**  
+ 30dBm (Average power)
- **Variable Output Level**  
To be able to set rated level (+ 30dBm).
- **Level Control**  
Average AGC
- **Phase Relationship**  
Phase relationship between input and output is inverted.