

# RC931A

TELEVISION INSTRUMENTS

## SYNTHESIZED FREQUENCY CONVERTER



### General

The RC931A is a synthesized frequency converter for the RM73A satellite digital modulator, converting frequencies of 140.00 MHz to anywhere from 30.00 to 2,400.00 MHz.

### Features

- Includes low phase noise frequency synthesizer.
- Since the frequency synthesizer can generate any frequency within the 30.00 to 2,400.00 MHz range in 10 kHz increments, it is capable of outputting TV channel frequencies in the VHF and UHF bands as well as in the 1st IF (BS-1) band of satellite broadcasting.
- Output level can be freely set within a range of 0 to -100 dBm in 1 dB increments.

### Specifications

- Input signals
  - Input impedance 50  $\Omega$ , unbalanced
  - Input level 0 dBm
  - Input frequency 140 MHz

- Output signals
  - Output impedance 50  $\Omega$ , unbalanced
  - Output level 0 to -100 dBm  
(variable in 1 dB increments)
  - Output frequency 25 to 2,400 MHz  
(variable in 10 kHz increments)
  - Frequency accuracy
    - $\pm 100$  ppm, 30.00 to 500.00 MHz
    - $\pm 50$  ppm, 500.01 to 2,400.00 MHz
  - Frequency response
    - $\pm 1.0$  dB, 25.00 to 950.00 MHz
    - $\pm 1.5$  dB, 950.01 to 2,050.00 MHz
    - $\pm 2.0$  dB, 2,050.01 to 2,400.00 MHz
  - Spurious  $\leq -55$  dB
- General specifications
  - Power supply AC 90 to 250  $\pm 10\%$ , 50/60 Hz
  - Power consumption Max. 120 VA
  - Operating temperature range 10°C to 40°C
  - Relative humidity 25% to 90% RH (non-dewing)
  - Dimensions 426 (W) x 99 (H) x 510 (D) mm
  - Weight Approx. 12.5 kg

