

### Features

- Excellent phase noise
- Fine frequency step
- Low intermodulation distortion
- Dual conversion
- Built-in high stability internal reference
- High reliability
- Remote / manual control

### Specifications

| 70 MHz to C-Band Up Converter |                                |  |
|-------------------------------|--------------------------------|--|
| Input Frequency Range         |                                | 70±20 MHz                                |
| Input Level                   |                                | -40 dBm to -25 dBm                       |
| Input Return Loss             |                                | 23 dB min.                               |
| Input Impedance               |                                | 50 ohms                                  |
| Output Frequency Range        |                                | 5850 - 6425 MHz                          |
| Conversion                    |                                | Dual Conversion, No Inversion            |
| Step Size                     |                                | 1 KHz                                    |
| Stability (Time)              |                                | ±1 X 10 <sup>-9</sup> / Day              |
| Stability (Temp.)             |                                | ±1 X 10 <sup>-9</sup> /Day (0 to 50 ° C) |
| RF Output Level               |                                | +17 dBm @ 1dB comp. (min)                |
| Carrier Mute                  |                                | -70 dBc                                  |
| Spurious                      | Non-Carrier<br>Carrier-Related | <-80 dBm<br><-65 dBc @ P1 dB             |
| 3rd Order IMP                 |                                | -60 dBc @ 0 dBm Output SCL               |
| Output Impedance              |                                | 50 Ohms                                  |
| Return Loss                   |                                | 20 dB                                    |
| Gain (RF to IF)               |                                | 35 dB min.                               |
| Gain Flatness                 |                                | ±0.25 dB @36MHz                          |
| Gain Stability                |                                | ±0.25dB/Day max.                         |
| Gain Slope                    |                                | 0.05 dB/MHz max.                         |
| VSWR (IF/RF)                  |                                | IF: 1.05:1 ; RF: 1.2:1                   |
| IF Bandwidth                  |                                | 40 MHz                                   |
| AM/PM Conversion              |                                | 0.1°/dB @ -5 dBm Output                  |
| External Reference            |                                | 10MHz @ +3 dBm                           |

| 70 MHz to C-Band Up Converter |   |
|-------------------------------|---|
| Internal Reference            | 10MHz, $\pm 5 \text{ e-}8$ over temp.   |
| Noise Figure                  | 11dB max.   |
| Group Delay                   | Linear 0.03 ns/MHz<br>Parabolic 0.01 ns/MHz <sup>2</sup><br>Ripple 1.0 ns peak-to-peak                                    |
| Phase Noise @ offset          | 100 Hz : -70 dBc/Hz<br>1K Hz : -79 dBc/Hz<br>10K Hz : -89 dBc/Hz<br>1M Hz : -99 dBc/Hz<br>10M Hz : -109 dBc/Hz            |
| Remote Control Interface      | RJ-45 LAN Port: SNMP & Remote Control protocol details to be provided for monitoring & control.                           |
| Front Panel display           | Suitable LCD display for displaying important parameters such as Frequency, Attenuation /Gain & Mute/Transmit status etc. |
| Front Panel Indicators (LED)  | Power ON/OFF, Mute ON/OFF, Local /Remote  |
| IF/RF Interface               | RF In: SMA (F)/ N (F)<br>IF Out: BNC (F)/ N (F)   |
| Power                         | Power ON Switch, 230 VAC, 50 Hz   |
| Operating temperature         | -10 to 50 ° C   |
| Humidity                      | Up to 95 % RH, Non-Condensing   |
| Mechanical                    | 19" Rack Mountable ( 1U Unit)   |

## Applications



Aerospace



Defence



Satcom



Broad Casting

