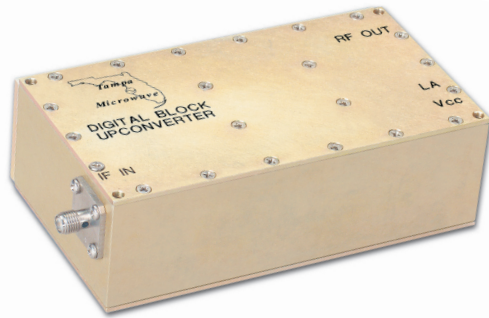


# BLOCK UP CONVERTERS



## FEATURES:

L BAND INPUT

C, X AND Ku OUTPUTS

LOW PHASE NOISE

**TAMPA MICROWAVE BLOCK UP CONVERTERS** are specifically designed to translate L-Band input frequencies to either C, X or Ku band. These block up converters have the quality and stability required for demanding transmitting applications.

## OPTIONS

- OUTPUT FILTERING
- EXTENDED TEMPERATURE RANGE -40° TO +85° C
- +/- 1 dB FLATNESS
- CUSTOM CONFIGURATIONS
- GAIN CONTROL
- OPTIONAL CONVERSION GAIN
- INTERNAL REFERENCE
- RACK MOUNT

## BLOCK UP CONVERTERS

TABLE 1

PART NUMBER *	INPUT FREQ.	OUTPUT FREQ.	INPUT CONN.	OUTPUT CONN.
BUC-4900	950 TO 1525 MHz	5.850 TO 6.425 GHz	"N" FEMALE	"N" FEMALE
BUC-7375**	950 TO 1525 MHz	5.850 TO 6.425 GHz	"N" FEMALE	"N" FEMALE
BUC-6950	950 TO 1450 MHz	7.900 TO 8.400 GHz	"SMA" FEMALE	"SMA" FEMALE
BUC-12800	950 TO 1700 MHz	13.75 TO 14.50 GHz	"SMA" FEMALE	"SMA" FEMALE
BUC-13050	950 TO 1450 MHz	14.00 TO 14.50 GHz	"SMA" FEMALE	"SMA" FEMALE

\*The Tampa Microwave part number indicates the LO frequency in MHz. BUC-"LOFREQ".

\*\* This BUC inverts the frequency spectrum of the input.

CONTINUED >

**SPECIFICATIONS**

**FUNCTIONAL:**

INPUT FREQUENCY: SEE TABLE 1

OUTPUT FREQUENCY: SEE TABLE 1

LO FREQUENCY STABILITY: EXTERNAL REFERENCE (EITHER VIA SEPA-  
RATE EXTERNAL CONNECTORS OR VIA IF PORT)

LO PHASE NOISE: -75 dBc @ 1kHz OFFSET  
-85 dBc @ 10 kHz OFFSET  
-95 dBc @ 100 kHz OFFSET

LO TO IF LEAKAGE: -20 dBm TYP

LO TO RF LEAKAGE: -20 dBm MAX.

NOISE FIGURE: 10 dB MAX.

MID BAND CONVERSION GAIN MIN.: 8 dB

MID BAND CONVERSION GAIN MAX.: 12 dB

CONVERSION GAIN FLATNESS OVER FREQ.: +/-1 dB MAX.

GAIN FLATNESS PER 40 MHz: +/-0.5 dB MAX.

MID BAND GAIN STABILITY VS TEMP: +/-1 dB

1dB COMPRESSION POINT (OUTPUT): 3 dBm MIN.

3RD ORDER INTERCEPT (OUTPUT): +13 dBm MIN.

IMAGE REJECTION: 20 dB MIN.

INTERNAL SPURIOUS NON SIG REL: -85 dBm WITHIN RF OUTPUT BAND  
SIG REL: -65 dBc WITHIN RF OUTPUT BAND

INPUT/OUTPUT VSWR 50 OHMS: 1.8:1 MAX.

**POWER REQUIREMENTS:**

VOLTAGE: 15 TO 18 VDC

POWER CONSUMPTION: 500 mA MAX. VIA FILTER FEEDTHROUGH  
OR IF CONNECTOR

**PHYSICAL:**

WEIGHT: 25 OUNCES NOM.

SIZE: 2.61 X 4.55 X 1.45 INCHES

INPUT CONNECTOR: SEE TABLE 1

OUTPUT CONNECTOR: SEE TABLE 1

LOCK ALARM CONNECTOR: OPEN DRAIN WHEN LOCKED  
(OPTIONAL TTL LEVEL)

GROUND CONNECTOR: SOLDER TURRET

**ENVIRONMENTAL:**

TEMPERATURE RANGE: -40 TO + 50 DEG. C

**STANDARD HOUSING**

