3100 Series
Block Up-Converters

PARADISE DATACOM
AN INTELEK GROUP COMPANY

Overview

Paradise Datacom's 3100 Series is available in C-, Ku-, and K-Bands.

The C-Band Block Upconverter (BUC) consists of a standard 5 watt BUC which is based on a simple block upconversion from L-Band (950 - 1525 MHz) to C-Band (5.85 - 6.425 GHz).

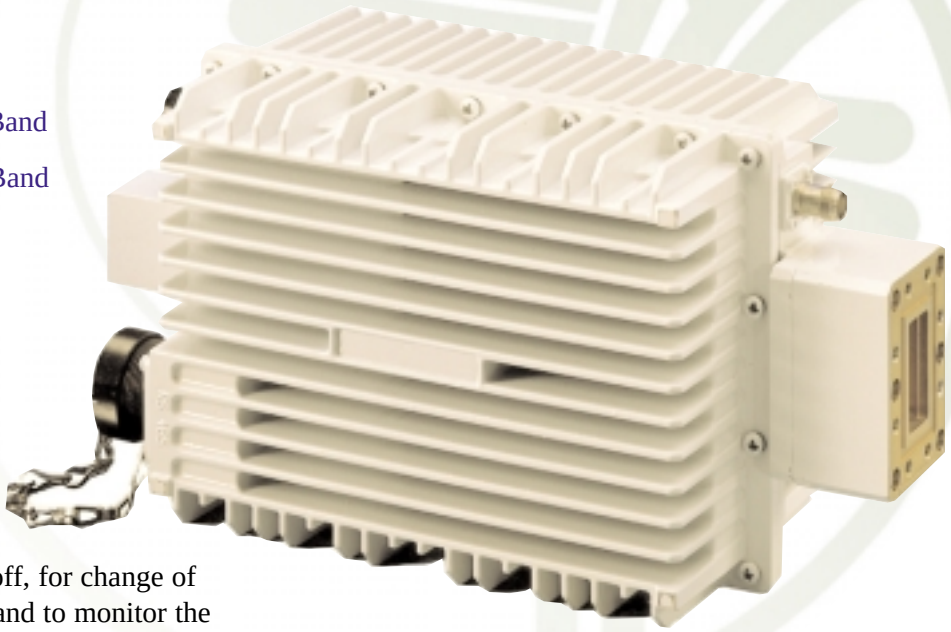
The Ku-Band Block Upconverter (BUC) consists of 2 and 4 watt BUCs which is based on a simple block upconversion from L-Band (950 - 1525 MHz) to Ku-Band (14.0 - 14.5 GHz).

The K-Band Block Upconverter (BUC) consists of 1 and 2- watt BUCs which is based on a simple block upconversion from L-Band (950 - 2050 MHz) to Ku-Band (17.3 - 18.4 GHz).

The interface to the BUC consists of a single 50 ohm coaxial cable which carries the modulated L-Band signal, a 10 MHz reference, 48 VDC (24 VDC available upon request) power, and an FSK monitor and control (M&C) link.

Features:

- Power levels up to 200 watts in C-Band
- Power levels up to 70 watts in Ku-Band
- Built in power detector
- Easy integration
- High reliability



Monitor and Control

The Monitoring & Control (M&C) function is used to turn the BUC on and off, for change of addresses, to provide status information, and to monitor the unit's output power and temperature.

All M&C functions can be implemented via both the FSK link up the IFL cable or through an independent RS-485 link, and are microprocessor controlled.

Both the gain and the reported power (via M&C) are calibrated over temperature and frequency to provide exceptional stability and accuracy. The BUC can be put into a "power on" mode if M&C to the BUC is not available. In this state the BUC will turn on upon applying the required voltage (48 or 24 VDC). The BUC retains all the calibration information for both gain and power monitor.

Options:

- Optional 1:1 redundancy kit
- INSAT Frequencies (6.725 to 7.025 GHz)
- Offset Ku-Band Frequencies (13.75 to 14.25 GHz)
- 24 VDC operation

Contact your *Paradise Datacom* Sales Representative for more information!

Rated Power (watts)	Model	Output Power		Gain (dB)	Configuration
		P_{1dB} (dBm)	P_{1sat} (dBm)		
C-Band Input/Output Frequency: 950-1525 MHz / 5.850 - 6.425 GHz					
5	31C-05A6720XX	37.0	37.5	67	A
10	31C-10A7020XX	40.0	40.5	70	A
10	31C-S010A6720XX	40.0	40.5	70	B
20	31C-20A7320XX	43.0	43.5	73	A
20	31C-S020A6720XX	43.0	43.5	73	B
40	31C-S040A6720XX	46.0	46.5	76	B
50	HPAC2050ACBXXXX	46.8	47.0	75	A
60	31C-S060A6720XX	47.8	48.3	78	A
75	HPAC2075ACBXXXX	48.5	48.8	75	A
100	HPAC2100ACBXXXX	49.5	50.0	75	A
125	31C-S125A6720XX	50.80	51.3	81	B
140	HPAC2140ACBXXXX	51.2	51.0	75	A
200	31C-S200A6720XX	52.3	53.0	81	B
200	HPAC2200ACBXXXX	52.3	53.0	75	A
250	HPAC2250ACBXXXX	53.0	53.9	75	A
Ku-Band Input/Output Frequency: 950-1525 MHz / 14.00 -14.50 GHz					
2	31K-02A6320XX	33.0	33.5	63	A
4	31K-04A6620XX	36.0	36.5	66	A
8	31K-08A6920XX	39.0	39.5	69	A
8	31K-S008A6320XX	39.0	39.5	69	B
10	31K-10A7020XX	40.0	40.5	70	A
10	HPAK2010ACBXXXX	39.0	40.0	75	A
16	31K-16A7220XX	42.0	42.5	72	A
16	31K-S016A6320XX	42.0	42.5	72	B
20	HPAK2020ACBXXXX	42.0	43.0	75	A
25	31K-S025A6320XX	44.0	44.5	74	B
25	HPAK2025ACBXXXX	43.0	44.0	75	A
30	31K-S030A6320XX	44.8	45.3	74	B
35	HPAK2035ACBXXXX	44.5	45.5	75	A
40	31K-S040A6320XX	46.0	46.5	76	B
40	HPAK2040ACBXXXX	45.0	46.0	75	A
50	HPAK2050ACBXXXX	46.0	47.0	75	A
70	HPAK2070ACBXXXX	47.5	48.5	75	A
K-Band Input/Output Frequency: 950-1525 MHz / 17.3 - 18.4 GHz					
1	BUC-L18-1	29.0	30.0	60	A
2	BUC-L18-2	32.0	33.0	60	A

OPTIONAL FREQUENCY BANDS

Palapa Band: 6.425 - 6.725 GHz
Insat Band: 6.725 - 7.025 GHz
Offset Ku-Band: 13.75 - 14.25 GHz

CONFIGURATIONS

A = SINGLE UNIT (STAND-ALONE)
B = RAIL ASSEMBLY WITH INTEGRATED BUC/BOOSTER SSPA

NOTE: Specifications are subject to change without notice. Individual specifications available upon request.

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