

1/3 RACK BLOCK CONVERTERS SATCOM APPLICATIONS



C-, X-, Ku-, DBS- AND Ka-BAND



FEATURES

- Compact unit
- Low power consumption
- Low intermodulation distortion
- Low phase noise
- Automatic 5/10 MHz internal/external reference selection
- Gain control
- RF- and L-Band signal monitor ports
- High-frequency stability
- Summary alarm
- Mute function on alarm or external mute input command
- LO frequency and power monitor
- CE certification

OPTIONS

- High-performance phase noise
- Higher frequency stability
- RS-422/RS-485 and 10/100 Base-T Ethernet
- Custom versions and multiband models are available

The Narda-MITEQ patented block converters are designed for one-third rack systems enabling a wide range of different functional configurations.

The functions are:

- L to RF Block Upconverters
- RF- to L-Band Block Downconverters
- RF Transmit to Receive-Band Test Translators
- RF Transmit to L-Band Test Translators
- 1:1 Redundant Switchover Unit

Each one-third rack unit consists of:

- Component related to the function
- Independent power supply
- Front-panel control
- Auto switch 5/10 MHz reference
- Remote control

APPLICATIONS

- All Standard Earth Stations
- Broadcast Earth Stations
- VSAT Earth Stations
- Mobile Earth Stations
- Transportable Earth Stations
- Military and Commercial

Us. Patent #7,510,090



1/3 RACK BLOCK CONVERTERS SATCOM APPLICATIONS

BLOCK CONVERTERS

INPUT (GHz)	OUTPUT (GHz)	LO (GHz)	MODEL NUMBER
BLOCK UP CONVERTERS: C, X, Ku-, DBS			
0.95 to 1.525	5.85 to 6.425	7.375	UPB1-6.1TR-INV
0.95 to 1.75	5.85 to 6.65	4.9	UPB1-6.25TR
0.95 to 1.35	6.7 to 7.1	5.75	UPB1-6.9TR
0.95 to 1.45	7.9 to 8.4	6.95	UPB1-8.15TR
0.95 to 1.45	12.75 to 13.25	11.8	UPB1-13TR
0.95 to 1.7	13.75 to 14.5	12.8	UPB1-14.125TR
0.95 to 1.45	14 to 14.5	13.05	UPB1-14.25TR
0.95 to 1.75	17.3 to 18.1	16.35	UPB1-17.7TR
0.95 to 2.05	17.3 to 18.4	16.35	UPB1-17.85TR
0.95 to 1.25	18.1 to 18.4	17.15	UPB1-18.25T
BLOCK UP CONVERTERS Ka-BAND			
0.95 to 1.2	28.35 to 28.6	27.4	UPB1-28.475TR
0.95 to 1.45	29 to 29.5	28.05	UPB1-29.25TR
0.95 to 1.2	29.25 to 29.5	28.3	UPB1-29.375TR
0.95 to 1.7	29.25 to 30	28.3	UPB1-29.625TR
0.95 to 1.95	30 to 31	29.05	UPB1-30.5TR
1 to 2	30 to 31	29	UPB1-30.5-1TR

Note: For additional details on specifications, please refer to datasheet D-321.

INPUT (GHz)	OUTPUT (GHz)	LO (GHz)	MODEL NUMBER
BLOCK DOWN CONVERTERS: C, X, Ku-, DBS			
3.4 to 4.2	0.95 to 1.75	5.15	DNB1-3.8TR-INV
3.4 to 4.2	0.95 to 1.75	8.55/11	DNB1-3.8TR
3.7 to 4.2	0.95 to 1.45	8.55/11.3	DNB1-3.95TR
7.25 to 7.75	0.95 to 1.45	6.3	DNB1-7.5TR
10.7 to 11.7	0.95 to 1.95	9.75	DNB1-11.2TR
10.95 to 11.7	0.95 to 1.7	10	DNB1-11.35TR
11.2 to 12	0.95 to 1.75	10.25	DNB1-11.6TR
11.45 to 12.25	0.95 to 1.75	10.5	DNB1-11.85TR
11.7 to 12.5	0.95 to 1.75	10.75	DNB1-12.1TR
11.7 to 12.75	0.95 to 2	10.75	DNB1-12.225TR
12.2 to 12.75	0.95 to 1.5	11.25	DNB1-12.475TR
BLOCK DOWN CONVERTERS Ka-BAND			
18.3 to 18.8	0.95 to 1.45	17.35	DNB1-18.55TR
19.7 to 20.2	0.95 to 1.45	18.75	DNB1-19.95TR
20.2 to 21.2	0.95 to 1.95	19.25	DNB1-20.7TR
20.2 to 21.2	1 to 2	19.2	DNB1-20.7-1TR
28.3 to 28.8	0.95 to 1.45	27.35	DNB1-28.55TR
29.25 to 29.5	0.95 to 1.2	28.3	DNB1-29.375TR
29.25 to 30	0.95 to 1.7	28.3	DNB1-29.625TR

TEST TRANSLATORS

INPUT (GHz)	OUTPUT (GHz)	LO (GHz)	MODEL NUMBER
RF TRANSMIT-BAND TO RF RECEIVE-BAND			
5.85 to 6.425	3.625 to 4.2	2.225	DNS-6.1/3.9TR
5.85 to 6.65	3.4 to 4.2	2.45	DNS-6.25/3.8TR
6.725 to 7.025	4.5 to 4.8	2.225	DNS-6.8/4.6TR
7.9 to 8.4	7.25 to 7.75	0.65	DNS-8.15/7.5TR
7.9 to 8.4	7.175 to 7.675	0.725	DNS-8.15/7.4TR
12.75 to 13.25	10.7 to 11.2	2.05	DNS-13/11.2TR
13.75 to 14.5	10.7 to 11.45	3.05	DNS-14/11TR
13.75 to 14.5	11.45 to 12.2	2.3	DNS-14/11.8TR
13.75 to 14.5	12 to 12.75	1.75	DNS-14/12.3TR
13.75 to 14.5	10.95 to 11.7	2.8	DNS-14/11.3TR
13.75 to 14.5	11.7 to 12.45	2.05	DNS-14/12TR
17.3 to 18.1	11.7 to 12.5	5.6	DNS-17.7/12.1TR
Ka-BAND			
29.5 to 30	19.2 to 19.7	10.3	DNS-29.75/19.45TR
29.5 to 30	19.7 to 20.2	9.8	DNS-29.75/19.95TR
29 to 30	19.2 to 20.2	9.8	DNS-29.5/19.7TR
30 to 31	20.2 to 21.2	9.8	DNS-30.5/20.7TR

INPUT (GHz)	OUTPUT (GHz)	LO (GHz)	MODEL NUMBER
RF TRANSMIT-BAND TO L-BAND			
5.85 to 6.65	0.95 to 1.75	4.9	DN1-6.25TR
5.925 to 6.425	0.95 to 1.45	7.375	DN1-6.175TR-INV
7.9 to 8.4	0.95 to 1.45	6.95	DN1-8.15TR
12.75 to 13.25	0.95 to 1.45	11.8	DN1-13TR
14 to 14.5	0.95 to 1.45	13.05	DN1-14.25TR
13.75 to 14.5	0.95 to 1.7	12.80	DN1-14.125TR
14.5 to 14.8	0.95 to 1.25	13.55	DN1-14.65TR
17.3 to 18.1	0.95 to 1.75	16.35	DN1-17.7TR
Ka-BAND			
28.35 to 28.6	0.95 to 1.2	27.4	DN1-28.475TR
29.25 to 29.5	0.95 to 1.2	28.3	DN1-29.375TR
29.25 to 30	0.95 to 1.7	28.3	DN1-29.75TR
30 to 31	0.95 to 1.95	29.05	DN1-30.5TR
30 to 31	1 to 2	29	DN1-30.5-1TR

Note: For additional details on specifications, please refer to datasheet D-320.

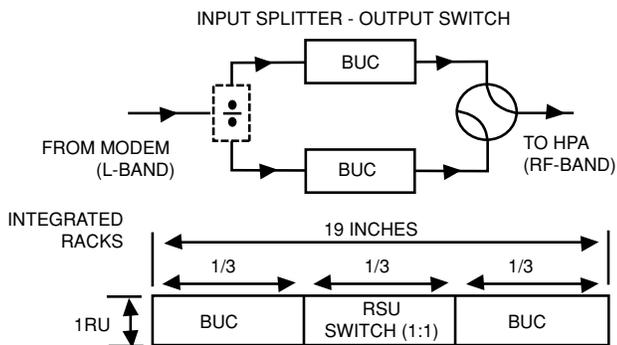
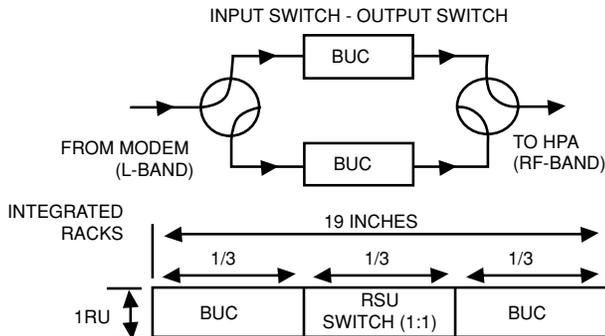
1:1 SWITCHOVER UNIT

FREQUENCY RANGE (GHz)	CONNECTORS	MODEL NUMBER
1:1 SWITCHOVER UNIT SINGLE-TRANSFER SWITCH MODEL		
0.95 to 18.4	SMA	RSU-S-TR
18.4 to 31	2.92 mm	RSU-K-TR

Note: For additional details on specifications, please refer to datasheet D-322.

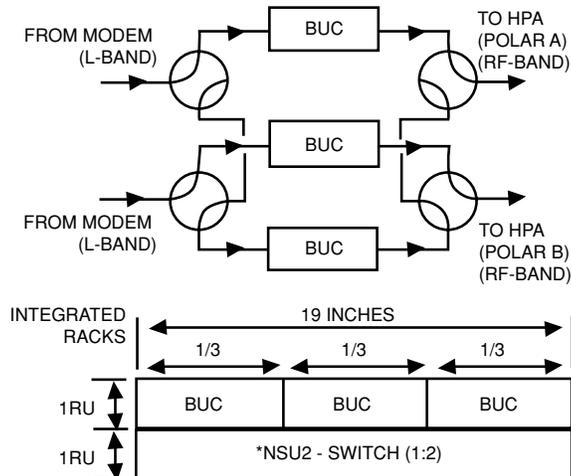
FREQUENCY RANGE (GHz)	CONNECTORS	MODEL NUMBER
1:1 SWITCHOVER UNIT DUAL-TRANSFER SWITCH MODEL		
0.95 to 18.4	SMA	RSU-S/S-TR
0.95 to 18.4/18.4 to 31	SMA/2.92 mm	RSU-S/K-TR
18.4 to 31	2.92 mm	RSU-K/K-TR

**1:1 REDUNDANT
BLOCK UPCONVERTERS**

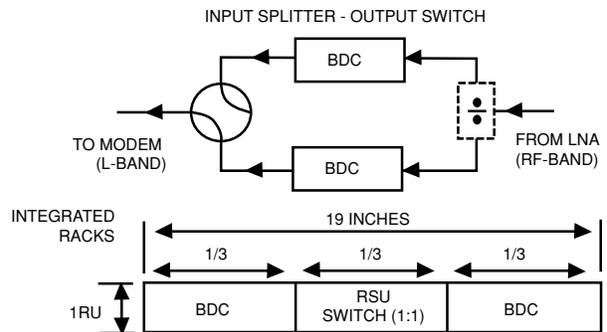
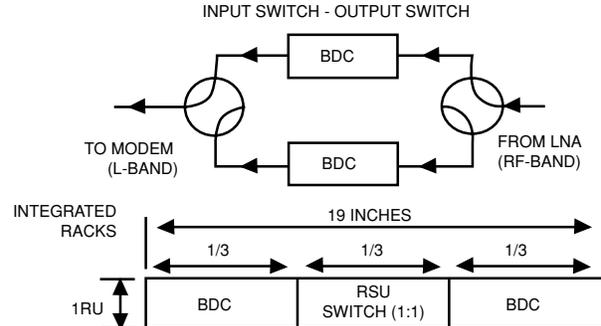


Note: Splitter is customer supplied.

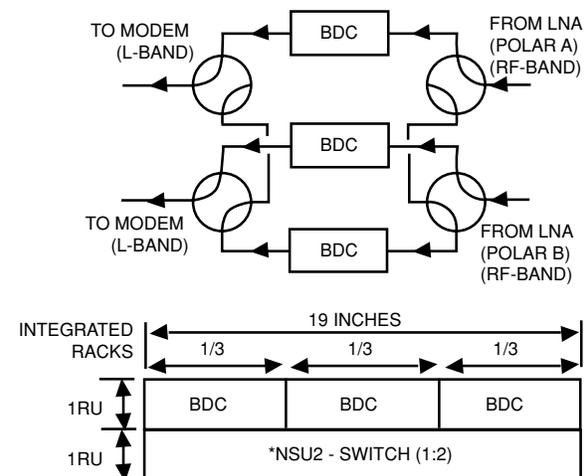
**1:2 REDUNDANT
BLOCK UPCONVERTERS**



**1:1 REDUNDANT
BLOCK DOWNCONVERTERS**



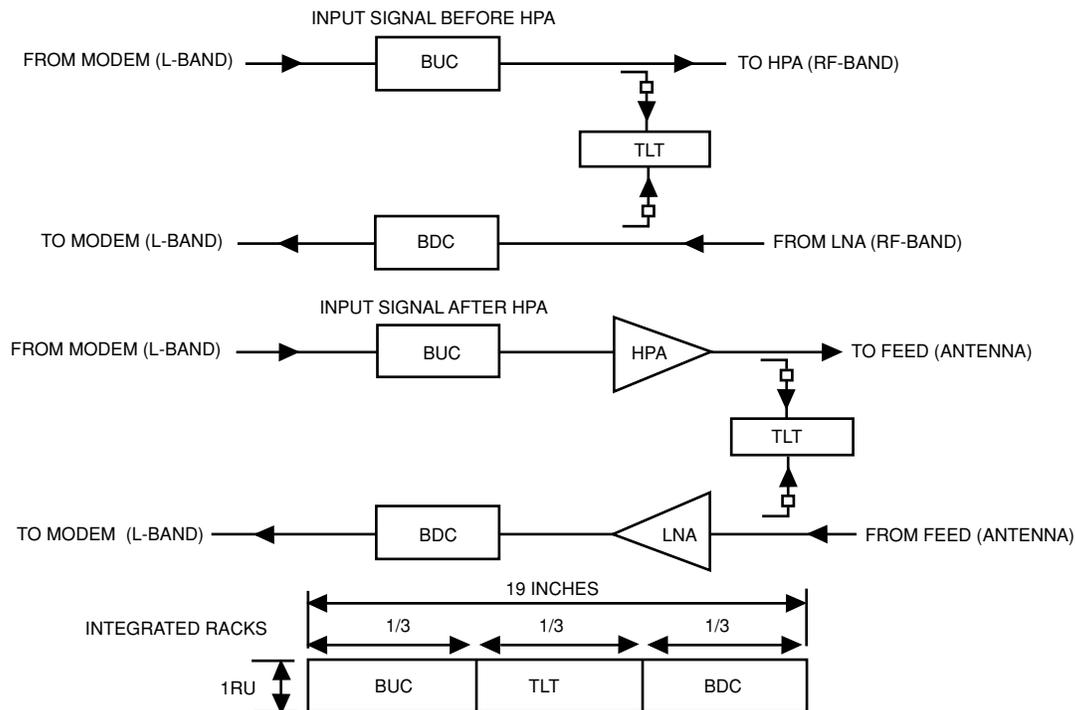
**1:2 REDUNDANT
BLOCK DOWNCONVERTERS**



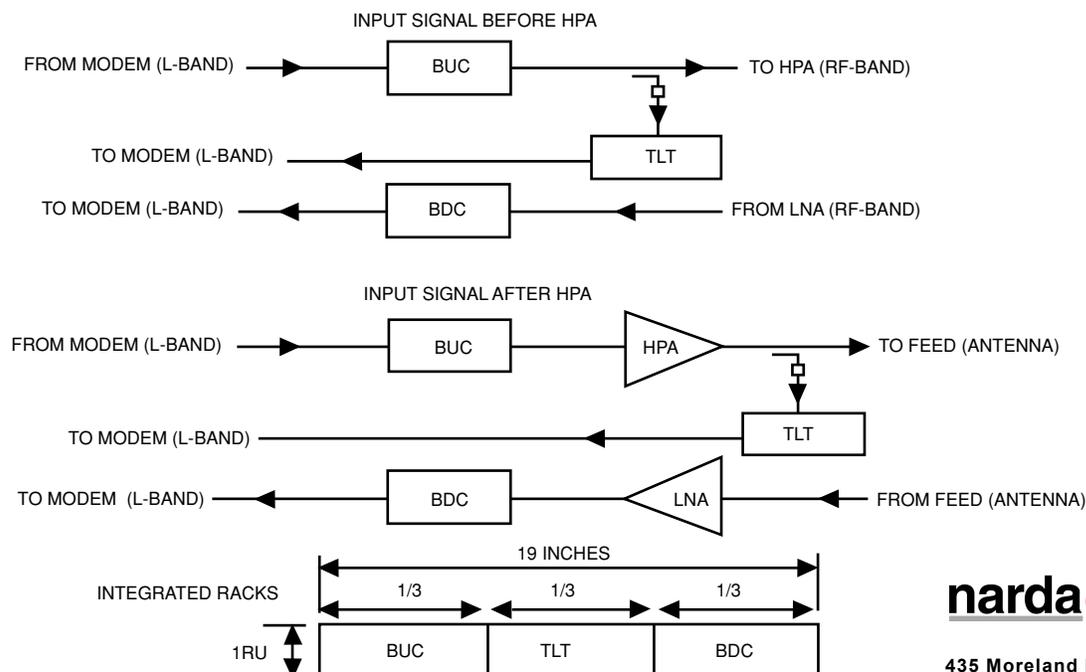
* NSU2 ordered for use with one-third rack converters require a special cable set, Narda-MITEQ part number 175638-1 and must be ordered as a separate item.

1/3 RACK BLOCK CONVERTERS SATCOM APPLICATIONS

RF TRANSMIT-BAND TO RF RECEIVE-BAND TEST TRANSLATORS



RF TRANSMIT-BAND TO L-BAND TEST TRANSLATORS



narda  **MITEQ**

435 Moreland Road
Hauppauge, NY 11788

Tel: 631-231-1700

Fax: 631-231-1711

Email: satcomsales@nardamiteq.com

www.nardamiteq.com

The material presented in this datasheet was current at the time of publication. Narda-MITEQ's continuing product improvement program makes it necessary to reserve the right to change our mechanical and electrical specifications without notice. If either of these parameters is critical, please contact the factory to verify that the information is current.

This material consists of Narda-MITEQ general capabilities information and does not contain controlled technical data as defined within the International Traffic in Arms (ITAR) Part 120.10 or Export Administration Regulations (EAR) Part 734.7-11.
D-339C/03.13.17