BD1800 Series

Ka-band block downconverters

INPUT SPECIFICATION		
1.	Frequency range:	Check model table
2.	Connector:	K-type
3.	Impedance:	50Ω
4.	Return loss:	≥15dB
OUTPUT SPECIFICATION		
5.	Frequency range:	Check model table
6.	Connector:	Indoor: SMA Outdoor: N-type
7.	Impedance:	50Ω
8.	Return loss:	≥15dB typical
9.	1dB compression point:	+10dBm (typ. +15dBm)
TRANSFER CHARACTERISTICS		
10.	Gain:	25dB (±1dB), fixed **Option SF**: remote interface with fixed gain. **Option SV**: remote interface with adjustable gain, 10 to 30dB
11.	Gain ripple: over any 40MHz transponder:	≤1 dB p.t.p.
	over band:	≤3 dB p.t.p
12.	External reference:	10MHz, 0dBm nominal
13.	Local Oscillator:	Check model table
14.	Noise figure: Single band models:	<16 dB
	Multi band models:	<20 dB
Spurii		
15.	Spurii:	<-60dBc
16.	Image rejection:	>50dB
PHASE NOISE		Typical
17.	10Hz:	<-40 dBc/Hz
18.	100Hz:	<-65 dBc/Hz
19.	1kHz:	<-80 dBc/Hz
20.	10kHz:	<-90 dBc/Hz
21.	100kHz:	<-90 dBc/Hz
22.	1MHz:	<-110 dBc/Hz
23.	Mains related:	<-50 dBc
MISCELLANEOUS		
24.	Power supply:	Indoor unit: 115V/230V ±10%, 50/60Hz ±10%, single band: 30VA Multi band:40VA Outdoor unit: 17V DC, 500mA, via L-band input, multiplexed with L-band signal.
25.	Mechanical:	Indoor Unit: 1U 19'' frame Outdoor unit: Metal box, IP67 rating
26.	Temperature: Operating:	-20° to +50°C
	Storage:	-50° to +70°C
27.	Summary alarm:	NO and NC dry relay contacts Indoor: via rear mounted connector Outdoor: via L-band output
28.	Summary alarm indication:	Indoor: Through front panel LED
29.	Remote interface:	None as standard Option S: Indoor: Serial (RS232 and RS485) and TCP/IP (SNMP and web browser) Outdoor: TCP/IP (SNMP and web browser)

MODEL TABLE

Model	Input band, GHz	Output band, MHz	LO, GHz
BD1801-1	17.70 to 18.70	1000 to 2000	16.7
BD1801-2	18.20 to 18.92	1000 to 1720	12.20
BD1801-3	18.92 to 20.20	920 to 2200	18.00
BD1801-4	19.80 to 20.80	1000 to 2000	18.80
BD1802-1	17.70 to 18.70 plus 18.70 to 19.70	1000 to 2000 plus 1000 to 2000	16.7 plus 17.7
BD1802-3	17.70 to 18.80 plus 18.60 to 19.70	1050 to 2150 plus 950 to 2050	16.65 plus 17.65
BD1803-1	17.70 to 18.70 plus 18.70 to 19.70 plus 19.70 to 20.70	1000 to 2000 plus 1000 to 2000 plus 1000 to 2000	16.7 plus 17.7 plus 18.7
BD1803-3	17.70 to 18.50 plus 18.50 to 19.20 plus 20.20 to 21.20	1000 to 1800 plus 1000 to 1700 plus 1000 to 2000	16.3 plus 17.3 plus 18.3
BD1804-1	17.70 to 18.70 plus 18.70 to 19.70 plus 19.70 to 20.70 plus 20.70 to 22.20	1000 to 2000 plus 1000 to 2000 plus 1000 to 2000 plus 1000 to 1500	16.7 plus 17.7 plus 18.7 plus 19.7
BD1804-6	17.20 to 18.20 plus 18.20 to 19.20 plus 19.20 to 20.20 plus 20.20 to 21.20	1000 to 2000 plus 1,000 to 2000 plus 1000 to 2000 plus 1000 to 2000	16.2 plus 17.2 plus 18.2 plus 19.2

Note: Specification subject to change at any time without prior notice.

These converter types are only a small selection of what is available. Please contact us for further frequency bands and features