

BD600 Series X-band Block downconverters

INPUT SPECIFICATION	
1. Frequency range:	Check model table
2. Connector:	Indoor: SMA Outdoor: N-type
3. Impedance:	50Ω
4. Return loss:	≥18dB typical
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 S: 10 to 30dB adjustable via remote interface
11. Gain ripple: over any 40MHz transponder: over input band:	≤0.5 dB p.t.p. ≤1.5dB p.t.p
12. Gain stability, 0°C to 50°C:	±1dB
LOCAL OSCILLATOR	
13. External reference:	Indoor: 10MHz, 0dBm nominal Outdoor: 10MHz, multiplexed with L-band signal, DC power and alarm signals, level -5dBm to +10dBm
14. Local Oscillator:	Check model table
15. Noise figure:	<15dB
16. Frequency stability, 0° to +50°C:	5x10 ⁻⁸
Spurii	
17. Image rejection:	>50dB
18. In-band spuria (at 0 dBm output)	≤-60dBm
PHASE NOISE	
	Typical
19. 10Hz:	<-45dBc/Hz
20. 100Hz:	<-70dBc/Hz
21. 1kHz:	<-80dBc/Hz
22. 10kHz:	<-90dBc/Hz
23. 100kHz:	<-100dBc/Hz
24. 1MHz:	<-110dBc/Hz
25. Mains related:	<-50dBc/Hz
MISCELLANEOUS	
26. Power supply:	Indoor: 115V/230V ±10%, 50/60Hz ±10%, 20VA Outdoor: +17V to +24V DC, 500mA, via L-band output
27. Mechanical:	Indoor: 1U 19" frame Outdoor: IP67Metal box
28. Temperature:	Operating: -20° to +50°C Storage: -50° to +70°C
29. Summary alarm:	NO and NC dry relay contacts Indoor: via rear mounted connector Outdoor: via L-band output
30. Summary alarm indication:	Indoor: Through front panel LED
31. 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

Indoor/Outdoor	Input Frequency (GHz)	Output Frequency (MHz)	Local Oscillator (GHz)
BD651/BD65	7.25 - 7.75	950 - 1,450	6.30
BD64	7.25 - 7.75	450 - 950	6.80
BD601	8.0 - 8.4	1650 - 2050	6.35
BD602	8.0 - 8.2	620 - 820	7.38
BD603	8.0 - 8.2	1100 - 1300	6.90
BD604-1	8.4 - 8.5	550 - 650	7.85
BD604-2	8.4 - 8.5	540 - 640	7.86
BD680	7.45 - 7.55	670 - 770	6.68
BD681	7.9 - 8.4	950 - 1450	6.95
BD682	7.7 - 7.9	1100 - 1300	6.60
BD683	7.9 - 8.2	1050 - 1350	6.85
BD691/BD69-1	7.95 - 8.55	800 - 1400	7.15
BD685/BD68	7.8 - 8.4	1000 - 1600	6.80
BD692/BD69-2	7.95 - 8.55	1350 - 1950	6.60
BD670	8.1 - 8.5	500 - 900	7.60
BD649	6.9 - 7.1	2100 - 2300	4.80

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