

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: over band: | ≤1 dB p.t.p. ≤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 | 1000 to 2000 plus | 16.7 plus |
| | 18.70 to 19.70 | 1000 to 2000 | 17.7 |
| BD1802-3 | 17.70 to 18.80 plus | 1050 to 2150 plus | 16.65 plus |
| | 18.60 to 19.70 | 950 to 2050 | 17.65 |
| BD1803-1 | 17.70 to 18.70 plus | 1000 to 2000 plus | 16.7 plus |
| | 18.70 to 19.70 plus | 1000 to 2000 plus | 17.7 plus |
| | 19.70 to 20.70 | 1000 to 2000 | 18.7 |
| BD1803-3 | 17.70 to 18.50 plus | 1000 to 1800 plus | 16.3 plus |
| | 18.50 to 19.20 plus | 1000 to 1700 plus | 17.3 plus |
| | 20.20 to 21.20 | 1000 to 2000 | 18.3 |
| BD1804-1 | 17.70 to 18.70 plus | 1000 to 2000 plus | 16.7 plus |
| | 18.70 to 19.70 plus | 1000 to 2000 plus | 17.7 plus |
| | 19.70 to 20.70 plus | 1000 to 2000 plus | 18.7 plus |
| | 20.70 to 22.20 | 1000 to 1500 | 19.7 |
| BD1804-6 | 17.20 to 18.20 plus | 1000 to 2000 plus | 16.2 plus |
| | 18.20 to 19.20 plus | 1,000 to 2000 plus | 17.2 plus |
| | 19.20 to 20.20 plus | 1000 to 2000 plus | 18.2 plus |
| | 20.20 to 21.20 | 1000 to 2000 | 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