

C-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 |

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

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|--|---|
| 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 p.t.p.
≤1.5dB p.t.p |
| 12. Gain stability, 0°C to 50°C: | ±1dB |

LOCAL OSCILLATOR

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|---------------------------------------|--|
| 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: | <16dB |
| 16. Frequency stability, 0° to +50°C: | 5x10 ⁻⁸ |

Spurii

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|--------------------------------------|---------|
| 17. Image rejection: | >60dB |
| 18. In-band spurii (at 0dBm output): | <-60dBm |

PHASE NOISE

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|--------------------|-------------|
| | Typical |
| 19. 10Hz: | <-60dBc/Hz |
| 20. 100Hz: | <-70dBc/Hz |
| 21. 1kHz: | <-85dBc/Hz |
| 22. 10kHz: | <-110dBc/Hz |
| 23. 100kHz: | <-110dBc/Hz |
| 24. 1MHz: | <-116dBc/Hz |
| 25. Mains related: | <-60dBc |

MISCELLANEOUS

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|-------------------------------|--|
| 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: IP67 Metal 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)
BD501/BD50	3.625 - 4.2	950 - 1,525	5.15
BD511/BD51	3.4 - 4.2	950 - 1,750	5.15
BD513/BD53	3.4 - 4.2	700 - 1,500	4.9
BD514/BD54	4.2 - 4.8	950 - 1,750	5.75
BD515/BD55	5.85 – 7.05	950 - 2,150	4.9
BD516/BD56	5.85 – 7.025	950 - 2,125	4.9
BD591N/BD51N	3.4 - 4.2	950 - 1,750	No Inverted
BD592N/BD50N	3.625 - 4.2	950 - 1,525	No Inverted
BD584/BD52	4.5 - 4.8	950 - 1,250	5.75
BD595/BD55	3.4 - 4.2 plus 4.5 - 4.8	950 - 1,750 plus 950 - 1,250	5.15 plus 5.75

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