

#### 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

- |  |   |
|--|---|
| 10. Gain:  | 25dB (±1dB), fixed<br><b>Option S:</b> 10 to 30dB adjustable via remote interface |
| 11. Gain ripple: over any 40MHz transponder:<br>over input band: | ≤0.5 p.t.p.<br>≤1.5dB p.t.p   |
| 12. Gain stability, 0°C to 50°C:                                 | ±1dB  |

#### LOCAL OSCILLATOR

- |                                       |  |
|---------------------------------------|--|
| 13. External reference:               | Indoor: 10MHz, 0dBm nominal<br>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 <sup>-8</sup>   |

#### Spurii

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

#### PHASE NOISE

- |                    |             |
|--------------------|-------------|
|                    | 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

- |                               |  |
|-------------------------------|--|
| 26. Power supply:             | Indoor: 115V/230V ±10%, 50/60Hz ±10%, 20VA<br>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<br>Storage: -50° to +70°C   |
| 29. Summary alarm:            | NO and NC dry relay contacts<br>Indoor: via rear mounted connector<br>Outdoor: via L-band output   |
| 30. Summary alarm indication: | Indoor: Through front panel LED  |
| 31. Remote interface:         | None as standard<br><b>Option S:</b><br>Indoor: Serial (RS232 and RS485) and TCP/IP (SNMP and web browser)<br>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