nCELL-RU4460

5G Remote Radio Unit

4T4R Digital Radios

40W (46dBm) Output Power

5GNR

IP67 Outdoor Rated

The RU4460 from BTI is a high output power radio frequency unit (RRU) for 5G NR outdoor base stations. It forms a complete 5G base station together with the baseband unit (BBU), which is used in mobile communication cell cellular networking scenarios.

The platform support fiber optic cable cellular technology with CPRI/eCPRI protocol.The Power amplifier technology uses DPD (digital pre-distortion) technology, compared with analog technology, power consumption has been significantly improved. The platform is ideal for underground tunnel and outdoor overlay deployments for cellular services.

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| **KEY FEATURES** |
| * Support 4T4R, 5G NR Compliant * Up to 40W (46dBm) Output Power and 100MHz IBW * Supports Sub-6GHz TDD & FDD and External Alarm |

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| **TECHNICAL SPECIFICATIONS** | |
| **SYSTEM** | |
| **Bandwidth per Channel (Downlink & Uplink)** | ≤ 100 MHz (Contiguous) |
| **Digital Bandwidth per Channel (Downlink & Uplink)** | 3/5/10/20MHz LTE  20/40/50/60/80/100MHz NR |

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| **SUPPORTED BANDS** | | | | |
| **Band Frequency** | **3GPP Band** | **Downlink Frequency** | **Uplink Frequency** | **Max Bandwidth** |
| 2570-2620 TDD | N38 | 2570-2620 | 2570-2620 | 100 |
| 2300-2400 TDD | N40 | 2300-2400 | 2300-2400 | 100 |
| 2496-2690 TDD | N41 | 2496-2690 | 2496-2690 | 100 |
| 3300-3600 TDD | N78 | 3300-3600 | 3300-3600 | 100 |
| 3600-3800 TDD | N78 | 3600-3800 | 3600-3800 | 100 |
| *\* More bands will be supported in the roadmap* | | | | |

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| **INTERFACES** | |
| **Antenna Interface (All bands)** | 4.3-10 Female |
| **Optical Connector Type** | SFP+, Standard LC |
| **Optical Transmission Rate** | 9.8304GB/s |
| **Optical Fiber Length** | 1.4km / 10km / 30km  0.87mi / 6.21mi / 18.64mi |
| **Dry Contact** | 2 Inputs & 2 Outputs, NO and NC Mode |
| **Maintenance Interface** | Ethernet RJ45 |

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| **ELECTRICAL** | |
| **Complies with** | 3GPP TS36.106 | 3GPP TS25.106 |
| **EMC** | EN 301489-1 / -50, EN 50121-4, EN 55032, EN 61000-4 series |
| **Safety** | EN 60950-1, EN 60950-22, EN 62368-1, EN 50385 |
| **Maximum Power Consumption** | 650W |
| **Power Supply** | 48VDC ± 20% |

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| **ENVIRONMENTAL** | |
| **Mean Time Between Failure (MTBF)** | > 100,000 hours |
| **Operating Temperature** | 40 °C ~ +55 °C | -40 °F ~ +131 °F |
| **Humidity** | 5% to 100% (Non-Condensing) |
| **Cooling** | Passive |
| **Installation** | Wall or Pole |
| **Ingress Protection Rating** | IP67 (Outdoor) |
| **Complies with** | EN 300019-1-1, EN 300019-1-2, EN 300019-1-4 |

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| **MECHANICAL** | |
| **Size (Width x Height x Depth)** | 500 x 380 x 142 mm | 19.7 x 14.96 x 5.59 in |
| **Weight** | 27.9 kg | 61.5 lbs |

Contact Us Today

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