The BK-91N Quadruplexer has been designed using passive, proprietary techniques to ensure minimal loss and very high reliability.

BK-91N allows efficient combining of the standard cellular services to WiFi services at the standard WiFi standards of 802.11 (a), (b), (g) and (n) at 2.4 GHz and 5.8 GHz together with WiMAX at 4.9 GHz. It is suitable for use in a coaxial distributed in-building cellular network or DAS.

A simple bracket and tapped holes are provided for simple mounting to a surface or cable tray. The unit is available for outdoor applications. (09/13)

### Preliminary Specifications

- Combines WiFi & WiMAX to other DAS services
- 35 dB Input Isolation
- 20W Through Power
- Minimal RF Insertion Loss
- Rugged, High Reliability
- Low Passive IM., PIM
- Low Cost Design
- N & SMA connectors

**Input isolation:** >35 dB

**Impedance:** 50Ω nominal

**Main Line PIM:** <-130 dBc (tested 2 x +40dBm)

**Environment:** 0° - +55°C, IP64 (IP67 optional)

**Housing:** Passivated Aluminum

**Main Line Connectors:** N (f) triplate

**Injection Connectors:** SMA (f) stainless steel

**Weight, nom:** 40 oz (1.14 kg)

### Input Frequencies

<table>
<thead>
<tr>
<th>Frequency Band, MHz</th>
<th>Port</th>
<th>Passband Loss to J5, dB</th>
<th>Input VSWR</th>
<th>Power/DC Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Line</td>
<td>J1</td>
<td>&lt;1.0, typ 0.8</td>
<td>&lt;1.4:1</td>
<td>20W avg., 3 kW pk, 1A max.</td>
</tr>
<tr>
<td>WiFi 2.4</td>
<td>J2</td>
<td>&lt;3.0, typ 2.5</td>
<td>1.6:1 typ.</td>
<td>5W avg., 3 kW pk</td>
</tr>
<tr>
<td>WiMAX 4.9</td>
<td>J3</td>
<td>&lt;2.0, typ 1.5</td>
<td>1.6:1 typ.</td>
<td>5W avg., 3 kW pk</td>
</tr>
<tr>
<td>WiFi 5.8</td>
<td>J4</td>
<td>&lt;2.5, typ 2.0</td>
<td>1.6:1 typ.</td>
<td>5W avg., 3 kW pk</td>
</tr>
</tbody>
</table>

**Diagram**

- J5 Common Output
- J4 5.8 GHz
- J3 4.9 GHz
- J2 2.4 GHz
- J1 (698-2170 & 2600-2700 MHz)