Microlab Model BK-81N series Wireless Local Area Network (W-LAN) Injector is a filter diplexer based on BK-21N. This model has been designed and tested to meet the European Rail Standards. The Diplexer links W-LAN designed to 802.11(b) or (g) with a coaxial DAS, a distributed antenna system.

To minimize the effects of the WLAN Injector to the DAS, the inputs are well isolated and have minimal insertion loss over their respective frequency bands.

The W-LAN Injector has been designed using passive, proprietary techniques to ensure minimal loss and very high reliability. Corner holes are provided for simple mounting to a surface or cable tray. Unit is also available with 7-16 mm DIN connectors as the BK-81D. (01/13)

### Passband Specifications
- **Passband J1 to J3**: 2,400 to 2,500 MHz
- **Passband J2 to J3**: below 80 to 2,170 MHz
- **J1 to J2 Isolation**: >50 dB in band
- **J1 & J2 VSWR**: 1.5:1 max.
  - 1.3:1 typ., 0° to +70°C
- **J1 Passband Loss**: 0.6 ± 0.1 dB
- **J2 Passband Loss**: 0.3 ± 0.1 dB
- **Power Rating**: J1: 8W max.; J2: 150W avg., 3 kW pk.
- **Impedance**: 50Ω nominal
- **Intermod. Distortion**: <-140 dBc, <-150 dBc typical (test with 2 +43dBm tones)
- **Environment**: -40° - +85°C, IP67
- **Finish**: Connectors: Silver plated or Triplate; Housing: Passivated Aluminum
- **Weight, nominal**: 2.0 lbs (0.91 kg)

### Diagrams
- **BK-81D with 7-16 mm DIN connectors**
- **BK-81N with N connectors**