



Rev 2 - Original Release Date: Aug 5, 2024



Description:

MCV's tailored solution kit for RF Maintenance Engineers is designed to provide a comprehensive, portable, and versatile set of tools to be used with a spectrum monitor (not supplied by MCV) for detecting and analyzing interference in 5G networks, specifically, C-Band, CBRS, DoD, ESR and FAA bands. Other frequency bands can be included upon request.



Features:

- **Kit Packaging**: Each kit is housed in a Pelican case or equivalent, renowned for their robustness and security. Custom fittings ensure that all individual components are held securely.
- Versatile Compatibility and Broad Frequency Range: Designed to be agnostic to
 test equipment, the components of this kit can interface with various spectrum
 analyzers or monitoring systems across a wide frequency range. The LNA covers
 700-7500 MHz, and the antenna spans 1000-8000 MHz, ensuring broad
 applicability. This versatility allows the kit to be used across additional bands where
 no filters are required, or where alternative filters can be added upon request.
- **Filter:** Provides over 55 dB of rejection at band edges, effectively isolating desired signals from adjacent channel interference.
- Low Noise Amplifier (LNA): Boosts signal strength significantly with a 30 dB gain, enhancing weak signals. Its low noise figure and high OIP3 ensure clear and undistorted signal detection. The unit is battery-powered for convenient field use.
- **Antenna:** Features a high gain (10 dB) and excellent front-to-back ratio (minimum 20 dB), ensuring focused signal capture and reduced interference. Equipped with an ergonomic handle, it is easy to maneuver and position for optimal signal detection.

Benefits:

- **Comprehensive Solution**: By combining filters, LNAs, and antennas in a single kit, RF Maintenance Engineers are equipped with all necessary tools to detect, analyze, and mitigate interference effectively.
- **Ease of Use:** The agnostic nature of the kit components allows seamless integration with existing testing apparatus, making the kit a versatile addition to any RF Maintenance Engineer's toolkit.



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Included in the Kit:

| Part number | Qty | Description |
|---------------|-----|----------------|
| BCC5-ALB-A1-L | 1 | LNA Module |
| BCC5-ALB-A1-A | 1 | Antenna Module |
| BCC3500-100A1 | 1 | DoD Filter |
| BCC3625-150A1 | 1 | CBRS Filter |
| BCC3840-280A1 | 1 | C-Band Filter |
| BCC4100-100A1 | 1 | ESR Filter |
| BCC4300-100A1 | 1 | FAA Filter |

Block Diagram:



