The Model 645 VHF/UHF Antenna is designed for applications requiring a compact, accurate, multi-element, direction finding (DF) antenna, combined with a sensitive omnidirectional monitoring antenna. The 645 allows broadband operation from 20 to 3000 MHz for both DF and signal monitoring, when used in TCI’s Spectrum Monitoring System (SMS) or COMINT DF. Typical DF accuracy is 2 degrees (rms). The 645 supports calibrated signal amplitude measurements over the full frequency range, and includes built-in test equipment (BITE) for automatic testing and verification of the antenna’s operational status.

Get maximum sensitivity in a design that’s easier to transport.
The 645 features a nine-element directional DF array, plus a single omnidirectional monitoring antenna. Its DF array consists of nine vertically polarized fan elements that are housed in a plastic radome. The radome also includes a broadband biconical monitoring antenna and a broadband RF switch. In SMS or DF systems, the RF switch commutates signals from the DF elements to an external multi-channel DF/Monitoring receiver and generates test signals for DF calibration and automatic system self-test.

**KEY FEATURES**

- 20–3000 MHz broadband antenna for DF, monitoring, and metrics
- Rugged, lightweight construction for easy installation and long life
- Ideal for transportable, mobile, covert and portable applications
- Smaller size alternative to the classic TCI 641 Antenna*
- Unique design provides optimum balance between compact size and good sensitivity over a wide frequency range
- Includes built-in test and calibration unit, as well as magnetic flux gate compass

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