Universal Spherical Dipole Source (USDS)

A unique electromagnetically-isolated Comb Generator RF Electric field source with Quasi-Peak (QP) detector test functionality.

Ideal For:
- Verification of RF Emission Measurements
  - Any RF Test Laboratory Site, Complex RF Test Environment, or Shielding Effectiveness Assessment
- Quasi-Peak Detector Verification
- Verify Laboratory Turn-table Integrity

Features:
- Radiating spherical dipole frequency range extended:
  - 1.8 MHz to 16 GHz
- Selectable fundamental clock frequencies:
- Selectable mode for Quasi-peak detector testing
- Optically isolated dipole antenna
- Rechargeable Li-Ion batteries for long test operations

Advanced technology for accurate electromagnetic measurements
Universal Spherical Dipole Source (USDS)

**Universal Source**
- Broad RF output frequency range up to 16 GHz
- 4 selectable fundamental clock frequencies
- Quasi-Peak detector verification
- Output above 35 dBiV/m at 1 m

**Batteries**
- Two Li-Ion rechargeable battery cells inside the antenna
- External DC jack easily accesses internal charging circuit
- AC/DC supply is certified by international safety agencies
- Blades provided for international AC outlet configurations

**Spherical Dipole Antenna**
- Spherical dipole emission pattern
- Small, 10 cm, spherical shape
- Highly stable comb output
- Easy to use, highly predictable
- RF Isolation with Batteries
- 15 Hours of continuous operation
- Tripod mountable

The Universal Spherical Dipole System (USDS) provides real-world RF laboratory and field measurement teams a versatile broad-band electric field source!

The USDS is a radiated E-field source using a spherical dipole antenna to address many requirements in both the research and test community. It is applicable to OATS, GTEMs, semi-anechoic or shielded rooms, and any standard or complex RF test environment. The RF signal is a stable and highly repeatable comb generator with fundamental frequencies selected by the operator.

### Equipment Verification
Antennas/Baluns/Cables/Receivers can all develop problems that may go unnoticed, requiring expensive and time consuming re-testing. The USDS is ideal as an easy to use RF source for daily emission measurement equipment checks, in either horizontal or vertical polarization. The selectable pulsed RF function allows users to quickly verify Quasi-Peak detectors and Peak detectors performance separately.

### Shielding Effectiveness Testing
The small radiating element (10cm. in diameter) makes the USDS source ideal for placing inside most any size enclosure for quick-look shielding effectiveness measurements. The USDS is battery operated so the spherical dipole antenna is isolated, thus eliminating issues from cables fed through the enclosure.

1. Standard 10, 64, 100, & 133.3 MHz clocks, other custom frequencies available
2. Spectrum Analyzer Resolution Bandwidth = 100 KHz
3. Specifications subject to change without prior notice