



CREATIVE DIGITAL SYSTEMS INTEGRATION

# Digital Beamforming (DBF) SAR Antenna

## L-Band DBMs Simultaneously Tracking up to 16 Satellites

The DBF Search And Rescue (SAR) Antenna is an array of intelligent digital beamforming modules (DBMs) that captures and digitizes RF signals to bring the analog world into the digital realm (where splitting signals no longer equates loss of signal-to-noise ratio). CDSI’s DBMs are telemetry antennas able to acquire and track multiple targets simultaneously. One DBF SAR antenna can replace up to 16 parabolic antennas.

### Key Capabilities

- Acquires and Tracks up to 16 Satellites **Simultaneously**
- Greatly Reduced Physical Footprint and Ongoing Operational Costs
  - One Comparable DBF Antenna can Replace Several Traditional Pedestal Antennas
- Pyramidal structure providing three faces for total upper hemispherical coverage
- Flexible Antenna Aperture - Conforms to Any Shape
- Mesh Network Technology Affords Graceful Degradation and Fault Tolerance with Minimal Downtime
- Tile-based Architecture Allows Quick and Simple Maintenance



### Specifications

Tracking Satellites.....	Up To 16
Frequency of Operation.....	1554-1555MHz
Single Beam Bandwidth.....	150KHz
G/T (LL-Band).....	-2.0dB/K
Beamwidth.....	8-25° (Elevation Dependent)
Polarization.....	RHCP and LHCP
Beam Pointing.....	TLE or AZ/EL Steering
Outputs.....	RF, IF