

installation of these sub-systems involves mobile platforms of any kind. Installation services available include, but are not limited to, site-survey analysis, platform calibration, and installation and performance validation.

Espy provides a wide range of engineering services to assist customers with the installation, calibration and integration of both Espy- and customer-provided antenna solutions. Espy has a well-established track record at successfully providing these services across a wide range of user applications including fixed-site and mobile (land and sea) requirements.

#### ***ToadStool V/UHF-DF Antennas (Toadstool-3.0G GEN2 and Toadstool-3.0G/M)***

The Toadstool family of DF antennas are offered in two frequency coverage configurations and are best suited to permanent site installations. These antennas are delivered in a radome housing to protect the antenna elements and electronics from adverse weather conditions and can be further ruggedized to support marine-like operations (Toadstool-3.0G/M), if required. These antenna systems can be permanently installed on an antenna mast or temporarily mounted on a heavy-duty tripod.

**Figure 28: ToadStool-3.0G GEN2 V/UHF-DF Antenna**



Table 26: ToadStool-3.0G GEN2 V/UHF-DF Antenna Specifications

Feature	ToadStool-3.0G GEN2	ToadStool-3.0G/M
<b>Direction Finding (DF) Characteristics</b>		
DF Frequency Coverage	30~3,000 MHz	30~3,000 MHz
Polarization	Vertical	Vertical
A Band Frequency Coverage	30~120 MHz	30~120 MHz
B Band Frequency Coverage	100~800 MHz	70~920 MHz
C Band Frequency Coverage	700~3,000 MHz	680~3,000 MHz
A Band Azimuth Accuracy	3° RMS	3° RMS
B Band Azimuth Accuracy	2° RMS	2° RMS
C Band Azimuth Accuracy	2° RMS	2° RMS
Elevation Coverage Typical	-7° to +7° (full accuracy) -15° to +15° (reduced accuracy)	-7° to +7° (full accuracy) -15° to +15° (reduced accuracy)
<b>Reference (Monitoring) Characteristics</b>		
Frequency Coverage	20~3,000 MHz	30~3,000 MHz
A Band Frequency Coverage	N/A	50~500 MHz
AB Band Frequency Coverage	N/A	N/A
C Band Frequency Coverage	N/A	500~3,000 MHz
CD Band Frequency Coverage	N/A	N/A
A Band Antenna	Monopole	Monopole
AB Band Antenna	Monopole	Combined 5 dipoles
C Band Antenna	Monopole	Bi-conical
<b>Other Characteristics</b>		
Nominal Input Impedance	50 Ω	50 Ω
GPS Antenna	Included as standard	Included as standard
Compass	Optional	Optional
Diameter	43.31" (1100 mm)	43.31" (1100 mm)
Height <sup>12</sup>	29.6" (751.8 mm)	80.8" (2052 mm)
Weight	57.32 Lbs (26 kg)	176 Lbs (80 kg)
Wind Survival	93 mph (150 km/h)	93 mph (150 km/h)
Color <sup>13</sup>	White	White

The ToadStool3.0G GEN2 antenna increased the RF Monitoring frequency coverage from 3000 MHz to 6000 MHz. The DF range remains from 20~3000 MHz.

<sup>12</sup> The maritime Toadstool antenna system similar in size but weighs more than twice as much as the standard Toadstool antenna.

<sup>13</sup> Options for other colors are available upon request.