



## BUTTON ANTENNAS:

Haigh-Farr Button antennas are designed for applications where size and weight are critical. Models cover frequencies ranging from UHF to X-Band, and provide the omnidirectional coverage of a monopole in a rugged package. Select models have a filled-in overhead null, and, therefore, provide the added benefit of full hemispherical coverage.

Haigh-Farr Button antennas, with years of demonstrated reliability, utilize proven materials and methods of construction, providing a solid package that requires only one "D" hole in the vehicle for mounting. Superb protection is obtained through the use of a high-impact, high-temperature radome, with excellent properties for environments containing moisture and contaminants.

## APPLICATIONS:

|                                                                |
|----------------------------------------------------------------|
| Data Links, Telemetry, Transponder                             |
| Aircraft                                                       |
| UAVs                                                           |
| Helicopters                                                    |
| Tactical Missiles                                              |
| Ships                                                          |
| Ground-Based Vehicles                                          |
| Supersonic aircraft                                            |
| Single or Array Implementations with Power Dividers and Cables |

## FEATURES:

|                                                                                                    |
|----------------------------------------------------------------------------------------------------|
| Omni-directional Coverage in Azimuth                                                               |
| Overhead Null in Elevation Pattern (Most Models)                                                   |
| Models 2107, 2207, 13215, & 13230 have the overhead null filled in.                                |
| Frequencies from UHF to X-Band                                                                     |
| Input impedance of 50 Ohms                                                                         |
| Vertical Polarization                                                                              |
| Compatible with high power transponders                                                            |
| TNC and SMA connector options available                                                            |
| See representative radiation plots on the following page. Additional plots available upon request. |
| Small, Compact Footprint                                                                           |
| High Impact Radome Material                                                                        |
| Built to Withstand Extreme Shock & Vibration Environments                                          |



### CUSTOM ANTENNA DESIGN

Haigh-Farr designs custom antennas to meet customer specifications.



### LEVERAGE EXISTING DESIGNS

Haigh-Farr can take an existing design and customize it to meet your application, saving NRE dollars and design time.



### IN-HOUSE CAPABILITIES

Manufacturing & testing is done in-house.



## PART NUMBERS

### STANDARD BUTTONS

| Button P/N | Frequency Range GHz                              | Frequency Band | Connector Options | VSWR Max | Power Handling | Drawing | Height Inches [mm] | Diameter Inches [mm] | Weight OZ [grams] | P/N Options                                                                                                                                                                                                                                                   |
|------------|--------------------------------------------------|----------------|-------------------|----------|----------------|---------|--------------------|----------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6175       | 0.356 – 0.381                                    | UHF            | TNC               | 2.1:1    | 30 Watts       | F       | 7 [177.80]         | 0.95 [24.1]          | 4.23 [120]        | <b>6175</b> - TNC, Black Radome                                                                                                                                                                                                                               |
| 6160-FFF   | Centered between .420 – .600<br>50 MHz bandwidth | UHF            | TNC / SMA         | 2:1      | 30 Watts       | F       | 6.30 [160.0]       | 0.95 [24.1]          | 3.5 [99]          | <b>6160-FFF</b> - TNC, Black Radome<br><b>6160S-FFF</b> - SMA, Black Radome                                                                                                                                                                                   |
| 6180-FFF   | 310 - 355 MHz                                    | UHF            | TNC / SMA         | <2.1:1   |                | F       |                    |                      | 5.25 [150g]       | <b>6180-FFF</b> - TNC, Black Radome<br><b>6180S-FFF</b> - SMA, Black Radome                                                                                                                                                                                   |
| 13120      | 0.9 – 1.625                                      | UHF/ L-Band    | TNC               | 2:1      | 30 Watts       | A       | 2.69 [68.3]        | 0.92 [23.4]          | 2.63 [74.6]       | <b>13120</b> - TNC, White Radome                                                                                                                                                                                                                              |
| BN1-13100  | 1.2 – 3.4                                        | L/S            | SMA / TNC         | 2.15:1   | 30 Watts       | A       | 1.94 [49.28]       | 0.92 [23.4]          | 2 [57]            | <b>BN1-13100</b> - SMA, White Radome<br><b>BN1-13100T</b> - TNC, White Radome<br><b>BN1-13100-BLK</b> - SMA, Black Radome<br><b>BN1-13100T-BLK</b> - TNC, Black Radome                                                                                        |
| BN1-13110  | 1.4 – 2.7 and 4.0 – 5.5                          | L/S/C          | SMA / TNC         | 2:1      | 30 Watts       | B       | 1.82 [46.2]        | 0.92 [23.4]          | 1.82 [46.23]      | <b>BN1-13110</b> - SMA, White Radome<br><b>BN1-13110-BLK</b> - SMA, Black Radome<br><b>BN1-13110T</b> - TNC, White Radome<br><b>BN1-13110T-ER</b> - TNC, White Radome, Environmentally Robust<br><b>13110S-ER</b> - SMA, White Radome, Environmentally Robust |
| 13130      | 1.4 – 2.7 and 4.2 – 5.85                         | L/S/C          | SMA               | 2:1      | 30 Watts       | B       | 1.81 [46.0]        | 0.92 [23.4]          | 1.9 [55]          | <b>13130</b> - SMA, White Radome                                                                                                                                                                                                                              |
| 13200      | 1.4 – 7.0                                        | L/S/C          | SMA               | 1.8:1    | 30 Watts       | E       | 1.74 [44.1]        | 2.13 [54]            | 6 [170]           | <b>13200</b> - SMA, White Radome                                                                                                                                                                                                                              |
| 55445      | 1.6 – 2.5                                        | L/S            | SMA               | 2.5:1    | 30 Watts       | D       | 1.36 [34.4]        | 1.80 [45.7]          | 5.2 [147]         | <b>55445</b> - SMA, White Radome                                                                                                                                                                                                                              |
| BN3-13090  | 1.7 – 3.0 and 4.4 – 5.9                          | L/S/C          | SMA               | 2:1      | 30 Watts       | A       | 1.51 [38.43]       | 0.92 [23.4]          |                   | <b>BN3-13090</b> - SMA, White Radome                                                                                                                                                                                                                          |
| 3106-1     | 2.0 – 2.7                                        | S-Band         | TNC               | 2:1      | 30 Watts       | A       | 1.05 [26.67]       | 0.92 [23.4]          | 1.5               | <b>3106-1</b> - TNC, White Radome                                                                                                                                                                                                                             |
| 3106       | 2.20 – 2.50                                      | S-Band         | TNC / SMA         | 1.5:1    | 30 Watts       | A       | 1.25 [31.8]        | 0.92 [23.4]          | 1.5               | <b>3106</b> - TNC, White Radome<br><b>3106S</b> - SMA, White Radome<br><b>3106ELS</b> - Extra Long SMA, White Radome<br><b>3106-R</b> - TNC, White Radome, Directional                                                                                        |
| 13140      | 2.2 – 6                                          | L/S/C          | SMA / TNC         | 1.75:1   | 30 Watts       | A       | 1.05 [26.67]       | 0.92 [23.4]          | 1.3 [37]          | <b>13140</b> - SMA, White Radome<br><b>13140-BLK</b> - SMA, Black Radome<br><b>13140T</b> - TNC, White Radome                                                                                                                                                 |
| 2215       | 4.4 – 4.95                                       | C-Band         | TNC / SMA         | 1.75:1   | 30 Watts       | A       | 1.45 [37]          | 1.20 [30]            | 1.4 [40]          | <b>2215</b> - TNC, White Radome<br><b>2215S</b> - SMA, White Radome                                                                                                                                                                                           |
| 3107-1     | 4.40 – 5.00                                      | C-Band         | TNC / SMA         | 1.5:1    | 30 Watts       | A       | 0.95 [24.1]        | 0.92 [23.4]          | 1.1               | <b>3107-1</b> - TNC, White Radome<br><b>3107S-1</b> - SMA, White Radome                                                                                                                                                                                       |
| 3107S-1-HP | 4.40 – 5.00                                      | C-Band         | SMA               | 1.5: 1   | 80 Watts       | C       | 0.95 [24.1]        | 0.92 [23.4]          | 1.0 [29]          | <b>3107S-1-HP</b> - SMA, High Power, White Radome                                                                                                                                                                                                             |
| 13210      | 4.4 – 5.9                                        | C-Band         | SMA               | 1.75:1   | 30 Watts       | A       | 1.32 [33.4]        | 0.94 [23.9]          | 1.8 [52]          | <b>13210</b> - SMA, White Radome                                                                                                                                                                                                                              |
| 2216       | 5.25 – 5.85                                      | C-Band         | TNC               | 1.5:1    | 30 Watts       | A       | 0.48 [12.2]        | 0.92 [23.4]          | 0.9 [26]          | <b>2216</b> - TNC, White Radome                                                                                                                                                                                                                               |
| 3107       | 5.40 – 5.90                                      | C-Band         | TNC / SMA         | 1.5:1    | 30 Watts       | A       | 0.75 [19.0]        | 0.92 [23.4]          | 1.0 [29]          | <b>3107</b> - TNC, White Radome<br><b>3107S</b> - SMA, White Radome                                                                                                                                                                                           |
| 3107S-HP   | 5.40 – 5.90                                      | C-Band         | SMA               | 1.5: 1   | 80 Watts       | C       | 0.95 [24.1]        | 0.92 [23.4]          | 1.0 [29]          | <b>3107S-HP</b> - SMA, White Radome, High Power                                                                                                                                                                                                               |
| 13000T-ER  | 5.40 – 5.90                                      | C-Band         | TNC               | 1.5:1    | 30 Watts       | C       | 0.95 [24.1]        | 0.92 [23.4]          | 0.75 [22.3]       | <b>13000T-ER</b> - TNC, White Radome, Environmentally Robust                                                                                                                                                                                                  |
| 3108       | 5.40 – 9.60                                      | C/X            | TNC / SMA         | 2.2:1    | 30 Watts       | A       | 0.75 [19.0]        | 0.92 [23.4]          | 1.0 [33]          | <b>3108</b> - TNC, White Radome<br><b>3108S</b> - SMA, White Radome                                                                                                                                                                                           |
| 3108-1     | 6.40 – 7.20                                      | C-Band         | TNC / SMA         | 1.5:1    | 30 Watts       | A       | 0.75 [19.0]        | 0.92 [23.4]          | 1.0 [33]          | <b>3108-1</b> - TNC, White Radome<br><b>3108S-1</b> - SMA, White Radome                                                                                                                                                                                       |
| 13190      | 7.7 – 11.5                                       | C/X            | TNC               | 2:1      | 30 Watts       | A       | 0.75 [19.05]       | 0.92 [23.4]          | 1.0 [30]          | <b>13190</b> - TNC, White Radome                                                                                                                                                                                                                              |
| 3108-3     | 8.00 – 10.50                                     | X-Band         | TNC / SMA         | 2:1      | 30 Watts       | A       | 0.75 [19.0]        | 0.92 [23.4]          | 1.0 [33]          | <b>3108-3</b> - TNC, White Radome<br><b>3108S-3</b> - SMA, White Radome                                                                                                                                                                                       |
| 13180      | 8.0 – 12.0                                       | X-Band         | TNC               | 3.3:1    | 30 Watts       | A       | 0.48 [12.2]        | 0.92 [23.4]          | 1.0 [28]          | <b>13180</b> - TNC, White Radome                                                                                                                                                                                                                              |

### OVERHEAD NULL FILLED BUTTONS

| Button P/N | Frequency Range GHz | Frequency Band | Connector Options | VSWR Max | Power Handling | Drawing | Height Inches [mm] | Diameter    | Weight OZ [grams] | P/N Options                                                                                                                                          |
|------------|---------------------|----------------|-------------------|----------|----------------|---------|--------------------|-------------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13230      | 1.2 – 1.4           | L-Band         | TNC               | 2.2:1    | 30 Watts       | D       | 1.36 [34.4]        | 1.80 [45.7] | 5 [135]           | <b>13230</b> - TNC, White Radome                                                                                                                     |
| 13215      | 1.43 – 2.50         | L/S            | TNC / SMA         | 2:1      | 30 Watts       | D       | 1.36 [34.4]        | 1.80 [45.7] | 5.1 [144]         | <b>13215</b> - TNC, White Radome<br><b>13215-BLK</b> - TNC, Black Radome<br><b>13215S</b> - SMA, White Radome<br><b>13215S-GY</b> - SMA, Gray Radome |
| 2207       | 4.40 – 5.00         | C-Band         | TNC / SMA         | 1.75:1   | 30 Watts       | A       | 0.63 [16.0]        | 1.20 [30]   | 1.41 [40]         | <b>2207</b> - TNC, White Radome<br><b>2207S</b> - SMA, White Radome<br><b>2207-ER</b> - TNC, White Radome, Environmentally Robust                    |
| 2107       | 5.40 – 5.90         | C-Band         | TNC / SMA         | 1.5:1    | 30 Watts       | A       | 0.48 [12.2]        | 0.92 [23.4] | 0.9 [26]          | <b>2107</b> - TNC, White Radome<br><b>2107S</b> - SMA, White Radome<br><b>2107LS</b> - Long SMA, White Radome                                        |