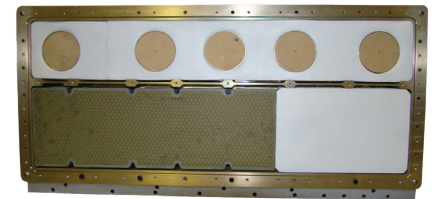




## SE135 SERIES ANTENNA

L3Harris' SE135 Series of linear interferometer antenna array panels provide for high-accuracy angle-of-arrival determination. The SE135 Series interferometer antenna array consists of two antenna sub-arrays and their respective radomes integrated into a single line-replaceable unit (LRU). Operation is from 2-18 gigahertz, with the above-mentioned antenna sub-arrays covering 2-6 and 6-18 gigahertz. The radome, which is integrated into the panel, provides protection from the flight environment allowing the SE135 to operate in the airstream without need for any additional radomes or aerodynamic fairings. The radome is field replaceable and designed for minimal insertion loss and phase error. Phase-optimized cavity-backed spiral apertures are used for the 2-6-gigahertz sub-array, while the 6-18-gigahertz sub-array uses linear horn antennas. The horns are fitted with an integrated polarizing grid that converts the inherently H-Pol horns to slant-45, thereby allowing for reception of linear (V-Pol and H-Pol), slant-45, and circular-polarized signals. The horns provide for increased antenna gain (versus conventional cavity-backed spiral apertures), which translates to increased system sensitivity. The SE135 includes growth potential to 40 gigahertz via the installation within the LRU of an 18-40-gigahertz interferometer sub-array, which can be provided by the factory. It is also field installable (requires replacement of the radome as well), allowing for easy retrofit of fielded systems. The SE135 Series has been designed to meet the stringent requirements of today's manned and unmanned military platforms.



### KEY FEATURES

- > Broadband frequency coverage
- > Ability to expand up to 40 gigahertz with the installation of additional sub-array
- > Rugged design
- > Ideal for both manned and unmanned military platforms

For further details and specifications, contact the factory at [antenna.info@L3Harris.com](mailto:antenna.info@L3Harris.com)

| ELECTRICAL                            |   |
|---------------------------------------|---|
| <b>Frequency range</b>                |   |
| Low-band                              | 2-6 GHz                                 |
| High-band                             | 6-18 GHz                                |
| <b>VSWR</b>                           | 3.0:1                                   |
| <b>Gain (to matched polarization)</b> |   |
| Low-band                              | 0dBic typical boresight gain            |
| High-band                             | +5.0 to +10 dBil typical boresight gain |
| <b>Polarization</b>                   |   |
| Low-band                              | RHCP                                    |
| High-band                             | Slant-45                                |
| <b>Azimuth coverage</b>               | +/-60 degrees                           |
| <b>Power handling</b>                 | +/- 10 degrees                          |
| MECHANICAL                            |   |
| <b>Connector</b>                      | SMA female                              |
| <b>Weight</b>                         | 22 lbs max                              |
| <b>Finish</b>                         | CAAPCOAT FP-250 lusterless gray         |
| <b>Operating temperature</b>          | MIL-DTL-5541 class 3                    |

### SE135 Series Antenna

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L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.

