HGA introduces the feed systems for high performance antenna systems at L/S/C/X/Ka/Ku-band.

### Corrugated Feed Horn
HGA corrugated feed horn provides Tx & Rx broad band characteristics and the improved vertical and horizontal or right- and left-handed circular polarization characteristics.

### Multi-Band Feed Horn
HGA multi-band feed systems are available for receiving C&Ku, C•X&Ku, L•S&Ka S•X&Ku-band simultaneously.
Monopulse Mode Coupler

A monopulse mode coupler is used to track the satellite precisely and quickly. This monopulse mode coupler functions are as below:
- Forming and detecting TE21 mode.
- Detecting horizontal with null on axis and radiation pattern
- Transmitting tolerance angle at radiation pattern by tracking receiver.

Diplexer

A diplexer has functions to divide the signals into V- and H-pols, RHCP and LHCP, or into Tx and Rx signals.
It consists of 2 ports, 3 ports, or 4 ports, separately, depending on the customer’s demands.
HGA diplexer provides high isolation characteristics in Tx and Rx.
Band Pass Filter
HGA series of band pass filters provide good passing and rejecting characteristics in the frequency of interests and in the frequency of no-interests, respectively.

Frequency Selective Reflector
For the certain multi-band antenna applications, the frequency selective surfaces are used in the feed systems. HGA provides multi-band solutions by designing and using the frequency selective surfaces in the frequency ranges of interests.
Feed Dehydrator

A feed dehydrator is used to remove humidity and to maintain the pressure of 0.5 psi inside the feed systems. This dehydrator is mounted in standard 19” rack and equipped with distribution devices in case of additional feed systems.