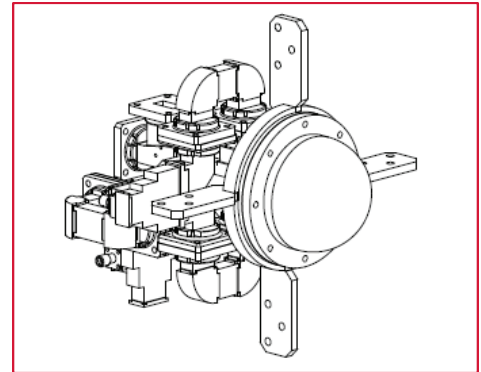


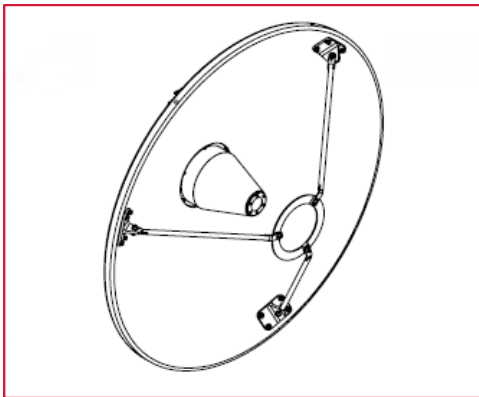
Monopulse Antennas

Monopulse antennas enable radars to obtain position information from targets with a single pulse of energy. This is achieved by utilizing multiple apertures within the same feed to receive the signal being reflected from the target. ARA has developed monopulse feeds for both cassegrain and prime-focus reflector configurations. The implementation in waveguide allows the use of high-transmit power. We have monopulse feeds for S-, C-, X-, Ku-, and Ka-bands.

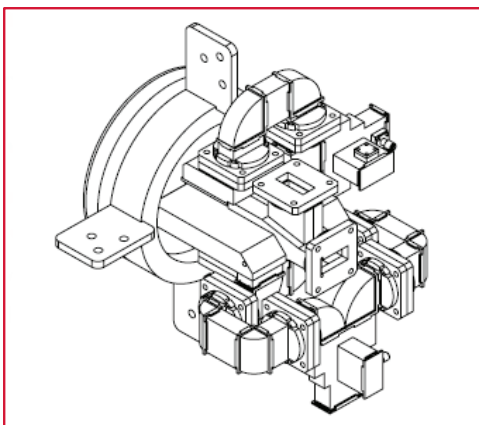
ARA is able to combine various feeds onto different dish sizes depending on the application. See some examples.



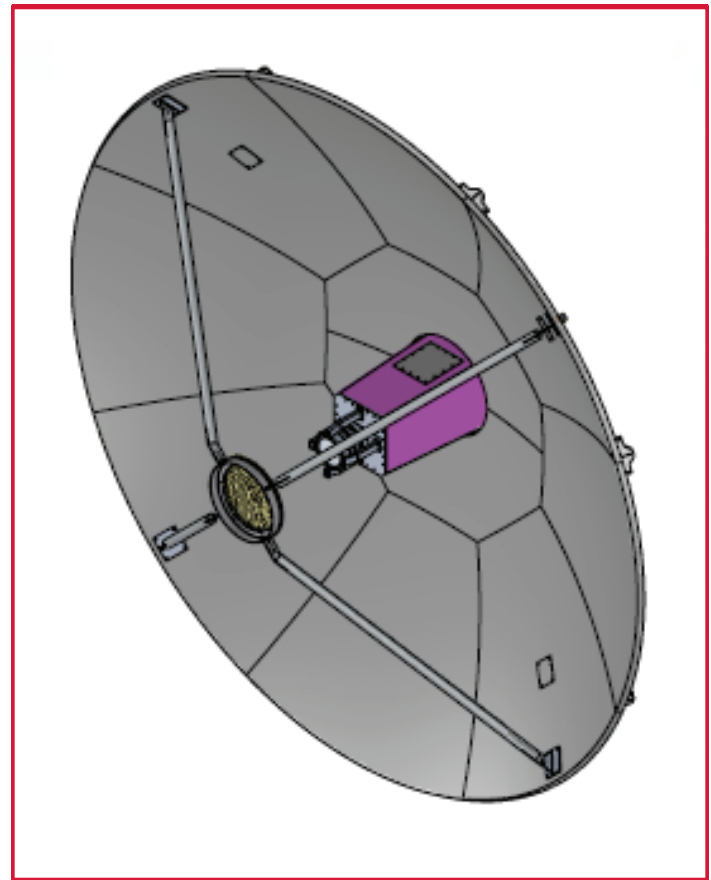
0444-800E



C1802-800C



0445-800



C1903-800A

This datasheet has been released into the public domain in accordance with International Traffic in Arms Regulations (ITAR) 22 CFR 120.11(6).

9.10.24

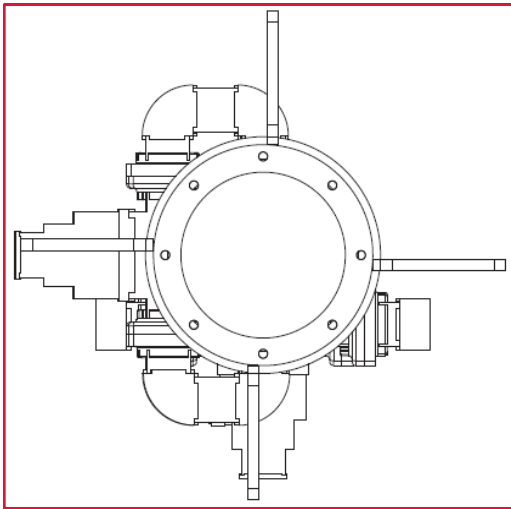
Antenna Specifications:

	0444-810	0445-810	0446-810	0447-810	0448-810	C0933-800	C1903-800	C1802-800
Polarization	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Tx - RHCP Rx - LHCP
Tracking Null Depth	30 dB min	30 dB min	30 dB min	30 dB min	30 dB min	30 dB min	31 dB min	30 dB min 36 dB optimal
Gain (on dish size)	40 dBi	40 dBi	40 dBi	40 dBi	40.7 dBi	> 43 dBi (at 3.1 GHz)	> 43 dBi (at 3.1 GHz)	42 dBi at 3 dB beamwidth
Isolation	> 25 dB	SUM to DELTA at > 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB	15 dB min 20 dB optimal
Frequency (GHz)	12.6 to 15.2	6.9 to 8.5	8.5 to 9.5	16.0 to 17.0	13.4 to 14.0	3.1 to 3.5	3.1 to 3.7	33.57 to 34.07
Waveguide Connections	WR-112	WR-112	WR-112	WR-62	WR-112	WR-284	WR-284	WR-28

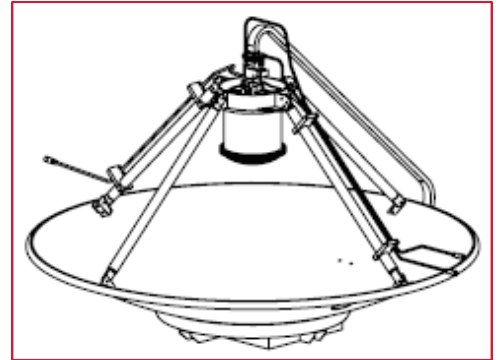
Feed Specifications:

	0444-800	0445-800	0446-800	0447-800	0448-800
Frequency (GHz)	12.6 to 15.2	6.9 to 8.5	8.5 to 9.5	16.0 to 17.0	13.4 to 14.0
Polarization	Linear	Linear	45° Slant	Linear	Linear
Sum Port	WR-62	WR-112	WR-112	WR-62	WR-112
Delta Port	AZ - SMA Male EL - SMA Female	SMA Female	AZ - SMA Male EL - SMA Female	SMA Female	AZ - SMA Female EL - SMA Male

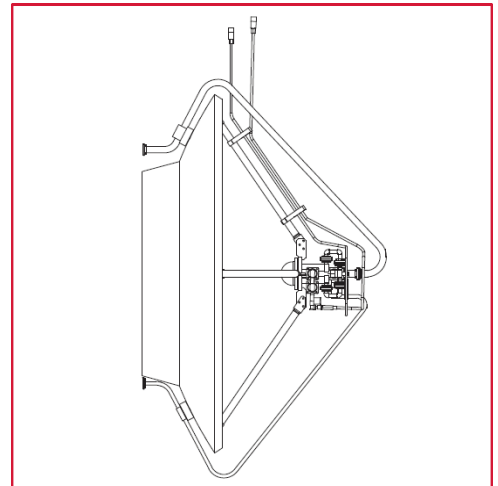
Product Drawings:



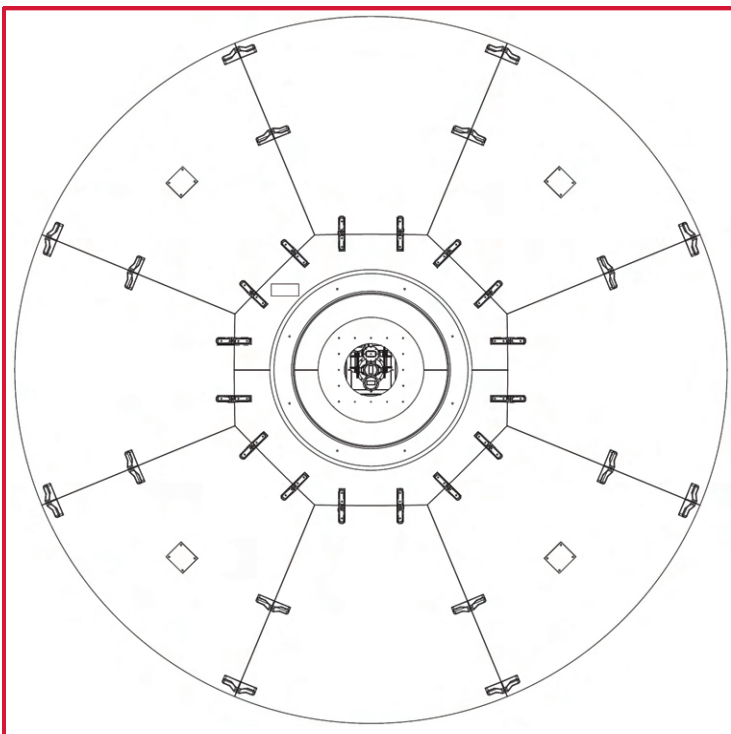
0447-800G



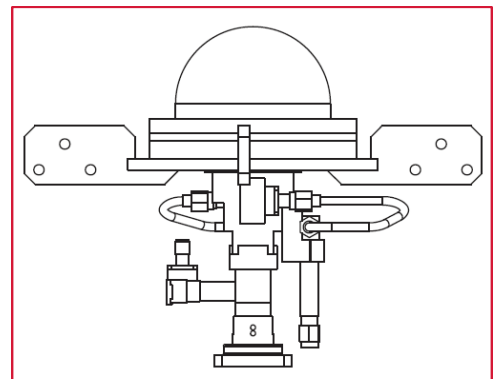
0446-810E



0444-810C



C0933-800E



0448-800D