

**Brand New still in original crates, 2012 ASC Signal 6.5 Meter C-Band 4-Port CP Tx/Rx 3 Axis Motorized Earth Station Antenna with New Novella B355 Beacon Receiver, this model ES65-2 can be converted to Ku-Band, Our guy will except \$65K (\$45,000 + Savings) and will ship the antenna, just FYI.**

**NEW Price: \$110,000 Current Asking Price \$65,000 (\$45K Savings)**

Includes the following: Brand New in Crate, ASC Signal (CPI) Antenna 6.5m C-Band Rx/Tx 4-Port Feed with motorized Tripod Mount, 6.5M Reflector, fully painted (white) reflector, Foundation Kit 4-port CP R/T C-band Feed for 3.625-4.2 & 5.85-6.425 GHz Novellas's Tracking rcvr, Motorized Actuators, 3ph, 220VAC, 50Hz (Fast: 0,5 Degrees/Sec AZ/B - Slow: 0,05 Degrees/Sec, Az/B)Single Tx Cross-axis Waveguide Lightning Protection Kit ASC Indoor ACU, Model NGC-1DUFiber IFL, 50MASC Outdoor MDU



## 6.5 Meter ESA

Like all ASC Signal earth station antennas, the 6.5 Meter Earth Station Antenna provides high gain and exceptional pattern characteristics.

This antenna system is designed to address the stringent requirements of both the television broadcast industry and telecommunications network operators who demand unsurpassed flexibility and electrical performance in high-quality, cost-effective, and reliable packages.

The 6.5 M is capable of operation at L-, S-, C-, X-, Ku-bands with the selection of feed and combiner systems.

The versatile tripod mount, features 180° azimuth coverage in three contiguous 120° overlapping ranges, and 85° continuous elevation adjustment. This large range of adjustment provides non-critical foundation orientation, and the ability to view geostationary satellites, from horizon-to-horizon, from any location worldwide.

The electrical performance and exceptional versatility provides the ability to configure the antenna with your choice of combining network. That versatility is provided at the time of initial purchase, as well as in the future, as your satellite communication requirements evolve.

This antenna system is used worldwide in broadcast applications and high density data, voice and communications networks. The ASC Signal 6.5 meter earth station antenna features a computer-optimized dual reflector Gregorian or prime focus optics system and close-tolerance manufacturing techniques.

This combination provides extremely accurate surface contour resulting in exceptionally high gain and closely controlled pattern characteristics. ASC Signal earth station antennas provide maximum durability with minimal maintenance.



### Features

- High Gain, Excellent Pattern Characteristics
- Advanced Gregorian Optics or prime focus
- L-, S-, C-, X-, Ku-band Operation
- Rugged Aluminum and Steel – 125 mph (200 kph) Wind Survival
- 3-year Warranty on All Structural
- FCC regulation 25.209
- ITU-R, S.580-5 and S.465-5

# 6.5 Meter ESA

## Design Standards

Reflector	Aluminum painted with highly diffusive white paint
Ground Mount	Hot-dipped galvanized steel, per ASTM-A123 for structural steel.
Hardware	Sizes $\leq$ 3/8 in (9.5mm), stainless steel, passivated per ML-F-14072-E300 Sizes $\geq$ 3/8 in (9.5mm), hot-dipped galvanized stainless steel, passivated per ASTM-A123

## Environmental Performances

Operating Temperature	-40° to 52°C (-40° to 125°F)
Seismic (Earthquake)	1 G Vertical and Horizontal acceleration. Equivalent to a Richter Magnitude 8.3, and Grade 11 on the modified Mercalli Scale
Rain	4 in (102 mm) per hour
Solar Radiation	360 BTU/hr/ft <sup>2</sup> (1135 Watts/m <sup>2</sup> )
Relative Humidity	100%
Shock and Vibration	As encountered by commercial Air, Rail and Truck shipment.
Atmospheric Conditions	As encountered by Moderately Corrosive Coastal and Industrial Areas.
Survival Winds	125mph (200km/h) in any position of operation
Operational Winds	45mph (72km/h) Gusting to 65mph (105km/h)

## Mechanical Performances

The 6.5m Antenna mechanical general specifications and performances are listed in below table. Additional information, dimensions and layout may be provided by ASC Signal on a case-by-case basis.

Optics Type	- Dual Reflector Gregorian - Prime Focus
Reflector Material	Precision-Formed Aluminum
Reflector Segments	16
Mount Type	Az over El, Tripod mount

<b>Antenna Pointing Range, Coarse/(Continuous)</b>	
Elevation:	5-90° (85°)
Azimuth:	180° (120°)
Polarization	180° (180°)

<b>Hub/Enclosure Dimensions</b>	
Diameter	52 in. (1.32 m)
Depth	46 in. (1.17 m)

## Shipping Information

<b>Packing Options</b>	
Standard Commercial Domestic Pack	Included
Ocean Export Pack - For non-containerized, packed for seal against salt water spray	OCEANSHIP-MED
Air Export Pack - For freighter aircraft shipments. Lower deck AirPack requires specialized bids	AIR EXPORT PACK-MD
Container Packaging	CNTPCK-MED

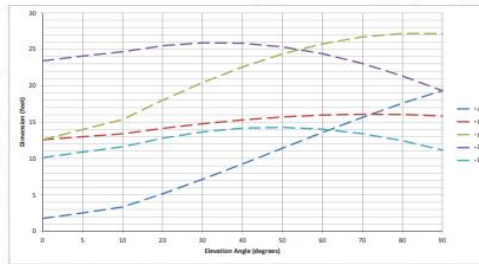
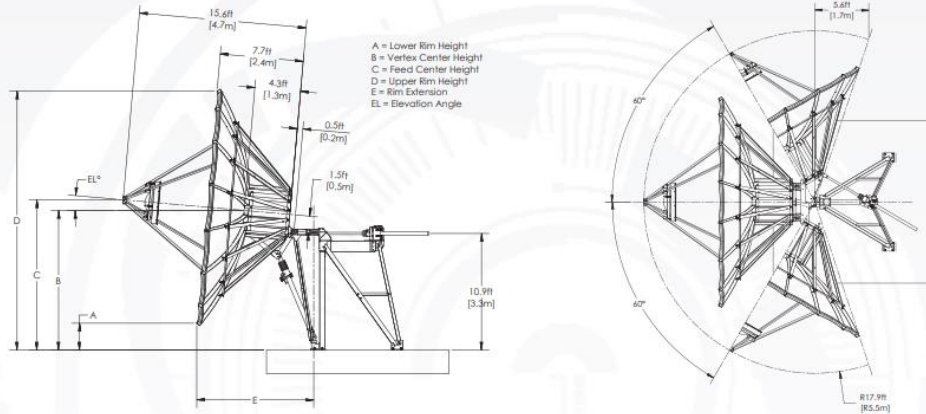
<b>Required Shipping Container</b>	
Standard 40 ft land/sea container	Quantity 1

Shipping container information is given for basic configuration and may vary depending on the selected options, please contact ASC Signal for specific container loading plan.



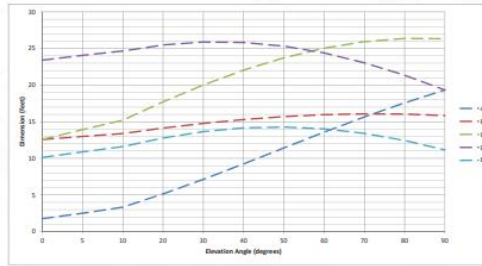
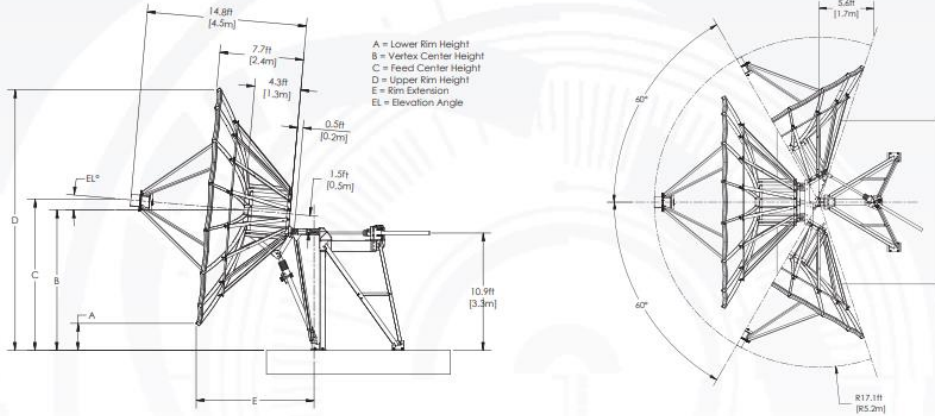
# 6.5 Meter ESA

## Dimensional Drawings Dual Optics Antenna



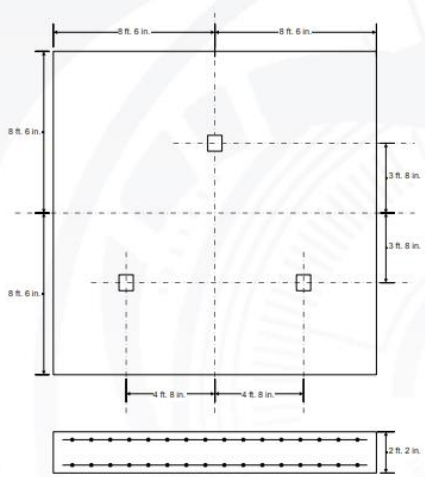
# 6.5 Meter ESA

## Dimensional Drawings Prime Focus Antenna

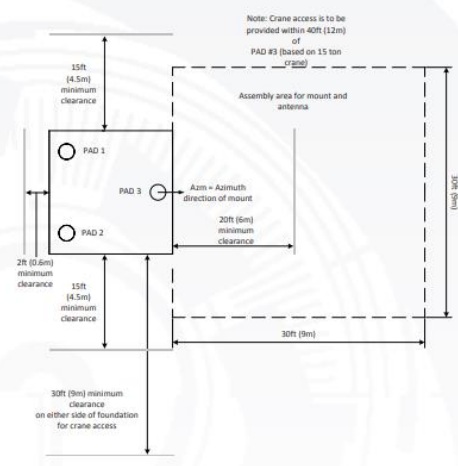


# 6.5 Meter ESA

## Typical Foundation Design



## Typical Foundation Information



Foundation information are provided in bulletin 7581438, please contact ASC Signal.

Soil Bearing Capacity,	3000 lb/ft <sup>2</sup> (14,646 kg/m <sup>2</sup> )
Reinforcing Steel,	0.843 Tons (764 kg)
Concrete Compressive Strength,	3000 psi (211 kg/cm <sup>2</sup> )
Foundation Size:	(for specific standard soil and typical design)
Length	17.0 ft (5.2 m)
Width	17.0 ft (5.2 m)
Depth	2 ft 2 in (0.66 m)
Concrete Volume	24.5 yd <sup>3</sup> (18.7 m <sup>3</sup> )

NOTE: Other typical foundation designs are available. Soil borings and foundation analysis should be performed by a qualified civil engineer.

# 6.5 Meter ESA

## Motor Drive Speed Summary

	Variable	
Azimuth	0.05°/s	0.5°/s
Elevation	0.05°/s	0.5°/s
Polarization	1°/s	

## Motorization

One motorization system is available for this antenna: The NGC tracking system that can support Steptrack, Smartrack and Ephemeris orbital tracking.

Motor Kit	
Azimuth/Elevation Motor Kit	NGC-MK7

Polarization Drive Kit (DC Step Motors) (Dual Optics Only)	
Standard Temperature (> -20°C)	NGC-PK9DRA
Low Temperature operation (< -20°C)	NGC-PK9DRA-LO

Outdoor Unit Controller	
Power 200 - 230 VAC, 3 Phase 50/60 Hz	NGC-ODU-208-5
Power 380 - 460 VAC, 3 Phase 50/60 Hz	NGC-ODU-380-5

## Antenna Configurations

C, X, Ku-band Earth Station Antennas	
Motorizable Mount with Az/EI Jackscrews.	ES65-2

L, S-band Prime Focus Earth Station Antennas	
Motorizable Mount with Az/EI Jackscrews.	ES65-2-PF

Antenna controller, motorization and options are detailed in specific bulletins, please contact ASC Signal.

## Motorization and NGC Options

Indoor	
NGC-IDU	NGC Rack Mounted Antenna Controller W/LCD Touch Panel
NGC-001	NGC-IDU Analog Telephone Modem
NGC-002	NGC-IDU Spectrum Analyzer Card, Analog
NGC-003	NGC-IDU DVB Receiver Card
NGC-004-02	NGC IDU, L-Band Internal Beacon Receiver
NGC-006	NGC-IDU Emergency Stop Button
NGC-007	NGC-IDU 10 Mhz Reference Source
NGC-008	NGC-IDU Redundant Power Supply
NGC-009	NGC-IDU Rack Slides
NGC-101	NGC-IDU Step Tracking Software
NGC-102	NGC-IDU Smartrack Software
NGC-103	NGC-IDU Predictive Track Software
NGC-104	NGC-IDU Full Tracking Capability Software
NGC-106	NGC-IDU Remote Access Software Package
NGC-107	NGC-IDU Spectrum Analyzer Enhanced User Interface
NGC-108	Receive Pattern Test Tool
NGC-109	Redundancy Control Software
NGC-111	Sand/Dust Deviator Feature
NGC-115	Uplink Power Control Software Function
NGC-ULPC-INTFC	Uplink Power Control System Single Channel
NGC-ULPC-INTFC-2	Uplink Power Control System Dual Channel
NGC-119	NGC High Availability System Redundancy Software

Outdoor	
NGC-201	NGC ODU Low Temperature Kit (-40 C)
NGC-202	NGC ODU High Temperature Kit (+60 C)
NGC-205	NGC ODU AC Polarization Drive Interface
NGC-206	NGC Exterior Emergency Stop Button
NGC-207	Pre Movement Alert Warning Light And Annunciator
NGC-211	Dual Path NGC Redundancy
NGC-AESC	Environmental System Controller
RED11-x	Hub Mounted 1:1 LNA/LNB Redundancy Plate
RED12-x	Hub Mounted 1:2 LNA/LNB Redundancy Plate

Antenna controller, motorization and options are detailed in specific bulletins, please contact ASC Signal.

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## Feed Matrix

L- BAND FEED SYSTEMS (Prime Focus)	PORT	CP	RX Various	TX Various
2CPL-65	2	X	X	X

S- BAND FEED SYSTEMS (Prime Focus)	PORT	CP	RX Various	TX Various
2CPS-65	2	X	X	X

C- BAND FEED SYSTEMS	PORT	CO	CP	LP	RX 3.625 - 4.2 GHz	RX 3.4 - 4.2 GHz	RX 4.5 - 4.8 GHz	TX 5.850 - 6.425 GHz	TX 5.850 - 6.725 GHz	TX 5.725 - 6.725 GHz	TX 6.725 - 7.025 GHz
2CLPNC-65	2	X		X	X			X	X		
2CPNC-65-109	2		X		X			X			
2CPNCR-65-109	2		X		X						
2CPUC-65	2		X				X				X
2LPNC-65	2			X	X			X			
2LPNCR-65	2			X	X						
2LPUC-65	2			X			X				X
2LPWC-65	2			X		X		X			
2LPWCR-65	2			X		X					
4CPNC-65-206	4		X		X			X			
4CPUC-65	4		X				X				X
4CPWWC-65	4		X			X				X	
4LPNC-65	4			X	X			X			
4LPUC-65	4			X			X				X
4LPWC-65	4			X		X			X		
4LPWWC-65	4			X		X				X	

X- BAND FEED SYSTEMS	PORT	CP	LOW PIM	RX 7.25 - 7.75 GHz	TX 7.9 - 8.4 GHz
2CPX-65	2	X		X	X
4CPX-65	4	X		X	X

KU- BAND FEED SYSTEMS	PORT	CP	LP	RX 10.7 - 12.75 GHz	RX 10.95 - 12.75 GHz	RX 10.7 - 11.7 GHz	RX 10.7 - 13.25 GHz	TX 13.75 - 14.8 GHz	TX 12.75- 13.25 /13.75 -14.8 GHz
2LPKU-65	2		X				X	X	
2LPKUR-65-W	2		X		X				
4LPKU-65-1	4		X	X				X	
4LPKU-65-2	4		X			X			X





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## Antenna Options and Spares

Anchor Bolt and Template Kits Options	
201630	Anchor Bolt Kit for 6.5 Meter Earth Station Antennas
206505	Anchor Bolt Template for 6.5 Earth Station Antennas
Heating Options	
FH5A	Ku- and K-Band Feed Heater Kit
FH9A	C-Band Feed Heater Kit
FHXA	X- Band Feed Heater Kit
WEC65R-208-100	Electric Hot Air De-Ice System, 208 VAC, 3 Phase
WEC65R-380-100	Electric Hot Air De-Ice System, 380 VAC, 3 Phase
Hub Equipment Options	
EMRGYLT-115	Emergency Hub Light Kit, 115 VAC
EMRGYLT-230	Emergency Hub Light Kit, 230 VAC
FV65-115	Fan and Vent Kit, 115 VAC
FV65-230	Fan and Vent Kit, 230 VAC
HUBHTR-230	Antenna Hub Heater, 230 VAC
HUBLCNTR-115/240	Hub Power Center, 115/240 VAC
HUBLCNTR-230	Hub Power Center, 230 VAC
HUBLT-115	Hub Light Kit, 115 VAC
HUBLT-230	Hub Light Kit, 230 VAC
Safety Options	
ANTGND-9	Foundation Installed Grounding Kit
LRK9	Lightning Rod Kit
MANPL7	Maintenance Platform and Ladder Kit
OBWRNLT-115	Obstruction Warning Light Kit, 115VAC
OBWRNLT-230	Obstruction Warning Light Kit, 230VAC

Other Options	
201769	Elevation Handwheel Kit (2 required)
201887	Azimuth Handwheel Kit
209906-2	Lubrication and Maintenance Kit
223711-2	Theodolite Alignment Kit (theodolite not incl)
BRNG-7693-C	Guard, Feed Window
BRNG-4676-KU	Guard Feed Window
BRNG-76-K	Guard Feed Window
FTST	Feed System Testing
NPN-LG	Custom Color Painting for Reflector
SPCOL-FEED	Custom Color Painting for Feed
TK-MAN-LG	Tool Kit, Large Manual Antennas
TK-MOT-LG	Tool Kit, Large Motorized Antennas
ANGVERN-7	Manual Angle Indicator
BRNG-374676-X	Guard, Feed Window, X- Band
OM65	OM Manual
202436	C- Band Spare Feed Window
221691	Spare Feed Window, Ku- Band
Azimuth and Elevation Cross Axis Waveguide Options	
XAPC-76	C- Band Cross-Axis kit, for 2 port feeds
XAPC-76-UPG	Upgrade C- Band Cross-Axis kit, 4 port feeds
XAPKU-76	Ku- Band Cross-Axis kit, for 2 port feeds
XAPKU-76-UPG	Upgrade Ku- Band Cross-Axis kit, 4 port feeds
XAPWC-65	Wideband C-Band Cross-Axis kit, for 2 port feeds
XAPWC-65-UPG	Upgrade Wideband C-Band Cross-Axis kit, 4 port feeds
Environmental Systems Options	
PDKU-76-208	Precipitation Deviator, Ku, 208 VAC, 3 Phase
PDKU-76-380	Precipitation Deviator, Ku, 380 VAC, 3 Phase



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 PBE5A65MC  
 All designs, specifications and availability of products and services presented in this catalog are subject to change without notice. (01/16)  
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About the 6.5 M antenna, you can move forward with it. BTW, it can be converted to Ku-band thru a kit as below, a 2015 price from ASC signal (now, part of CPI Industries)

ITEM	QUANTITY	TYPE & DESCRIPTION	UNIT PRICE	TOTAL PRICE
1.0	1	4LPKU-65-1 4-Port Universal Ku-Band Linear Polarized Transmit/Receive Feed System. Use on 6.5 Meter (-2) Earth Station Antenna. Operating Freq: Receive: 10.7 – 12.75 GHz / Transmit: 13.75 - 14.8 GHz Transmit 2kW Max. Power 80dB Transmit to Receive Isolation 35dB XPD 0.5 PSI Max Air Pressure to Feed	\$11,050.00	\$11,050.00
2.0	1	XAPKU-76 Polarization and Cross Axis Waveguide Kit, Ku-Band. One Run for use with 2-Port Feeds	\$3,418.00	\$3,418.00
3.0	1	XAPKU-76-UPG Polarization and Cross Axis Waveguide Kit, Ku-Band. 2 <sup>nd</sup> Run Upgrades XAPKU-76 to Operation with 4-Port Feeds.	\$3,060.00	\$3,060.00
<b>TOTAL USD:</b>			<b>\$17,528.00</b>	

## **PRODUCT SPECIFICATIONS 7.3 Meter Earth Station Antenna**

The superior performance of the ASC Signal 7.3 meter earth station antenna makes it an excellent choice for high-density data, voice, communications networks and broadcast applications.

The uniquely formed dual reflector

Gregorian system and close-tolerance manufacturing techniques provide an extremely accurate surface contour,

exceptionally high gain and closely

controlled pattern characteristics. The

7.3 meter 2 or 4-port C-band INTELSAT® Type Approved antennas speed

system deployment. Minimal testing and decreased administrative and approval requirements translate directly to cost

savings.

- Self-aligning main reflector - No field alignment.
- Rugged aluminum and steel construction.
- 3 Year warranty on structural components.
- Russian Homologation Certificate # OC/1-AO-136.
- INTELSAT® Type Approval, IA032A00, 2-port; IA032B00, 4-port.

## **SPECIFICATIONS**

7.3 Meter Earth Station Antenna

### **Electrical Performance**

C-band 4-Port

Linear Pol Feed

Receive Transmit

Frequency (GHz) 3.625- 5.850- 3.625- 5.850- 3.625- 5.850- 3.625- 5.850-

4.200 6.425 4.200 6.425 4.200 6.425 4.200 6.425

Antenna Gain at Output Flange (dBi  $\pm$ 0.2 dB) Frequency

4.0000 GHz 48.30 48.30 48.30 48.30

6.1750 GHz 51.60 51.70 51.60 51.60

Antenna Noise Temperature (Clear Sky Conditions at 68°F (20°C)

10° Elevation 48 K 30° Elevation 37 K 50° Elevation 35 K

Cross Polarization On Axis 35 dB 35 dB

Within 1 dB Beamwidth 35 dB 35 dB

Port-to-Port Isolation

Rx to Rx 40 dB Tx to Rx 85 dB Tx to Tx 40 dB

Tx Power Capacity 2500 W

### **Mechanical Performance**

Optics Type . . . . . Dual Reflector, Gregorian

Reflector Material . . . . . Precision Formed Aluminum

Reflector Segments . . . . . 16

Mount Type . . . . . Tripod Mount

Antenna Pointing Range . . . . . Elevation . . . . 5° Coarse, 85° Continuous

Azimuth . . . . 180° Coarse, 120° Continuous Polarization . . . 180° Coarse, 180° Continuous

Operational Temperature . . . . . -40°C to 52°C (-40°F to 125°F)

Wind Loading (Survival) . . . . with Motor . . . . . 200 km/h (125 mph) in Stationary Position without Motor . . . . 200 km/h (125 mph) in Stationary Position

Wind Loading (Operational) . . . with Motor . . . . . 72 km/h (45 mph) w Gusts up to 105 km/h 65mph)

without Motor . . . . 72 km/h (45 mph) with Gusts up to 105 km/h (65 mph)

**Current Price and specs for  
above antenna:**

**Item Name:** ASC Signal™ 7.3 Meter Tx/Rx  
C-Band Earth Station Antenna  
Motorized Tripod Mount with  
Az/El jackscrews

**Item Price w/ below  
options:** \$168,230.00

**Options:**

- ASC 7.3M C-Band Feed Systems:4LPWWC-7 (4-Port Extended C-Band Linear Polarized Tx/Rx, 2.5 kW power per port)
- 7.3M Az/El/Pol Cross Axis Waveguide:XAPC-73-UPG (Upgrades XAPC-73 for use w/ 4-Port C-Band Feeds, order w/XAPC-73)
- ASC 7.3M Motorization options:ACS400-100 (Antenna Programmable Controller. Use with MK(x)VS-(xxx) motorization)
- ASC 7.3M Variable Speed VAC option:MK7VS-208 (Variable Speed, 200-230VAC, 3 Phase 50/60 Hz, 4 or 5 conductor w/safety)
- ASC Signal LNA/LNB Support Kits:4LPWC9-LNASP-12 = 1:2 C-Band LNA Support Kit, 7.3Meter ESA