

CATALOGUE



INNOVATION FOR
TELECOM WORLD

A PRIVATE
VENTURE COMPANY

CATALOGUE FOR TETRA / TETRAPOL COVERAGE

RF ACCESSORIES

Established in 2012, Signity RF Solutions is one of the distinguished business firm involved in manufacturing, trading, importing and supplying of GPS And GSM Antennas, Radio Frequency Antennas, Patch Antennas, Whip Antennas and many more. We also providing services of Antennas Installation Services. Fabricated with supremacy, these presented products are immensely credited in the industry due to their longer life, perfect designs and durable finish standards.. Valued among our patrons, these products could be acquired from us at pocket-friendly rates. Additionally, to eradicate all the faults present in the consignment, these are well-examined on assorted restrictions of quality before shipment. We import from countries like China and Taiwan.

We are bestowed with a team of highly competent executives that aspires to provide supreme fulfillment to the clients. For this reason, they put forth efforts in bringing forth a gamut, which suffices the varied demands of the customers to a huge extent. Additionally, they hold enormous industry expertise and rich competence in their individual fields, grounded on which, they are assigned roles. Beneath the guidance of our mentor Ms. Akansha, we have acquired enormous reputation and acknowledgement from our clients. Her intellectual business plans and enormous knowledge have assisted us in accomplishing all our organizational objectives and goals within the postulated time.

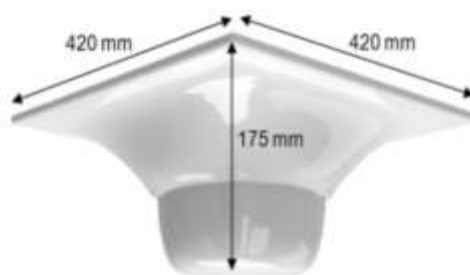


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DIPLEXERS

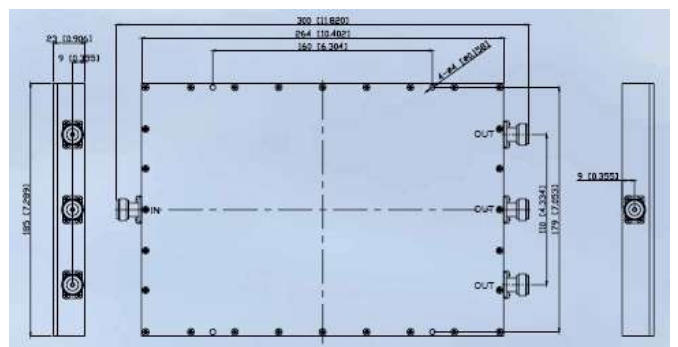
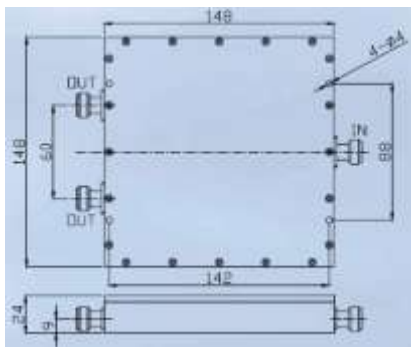
- Tetra Diplexers

ANTENNAS

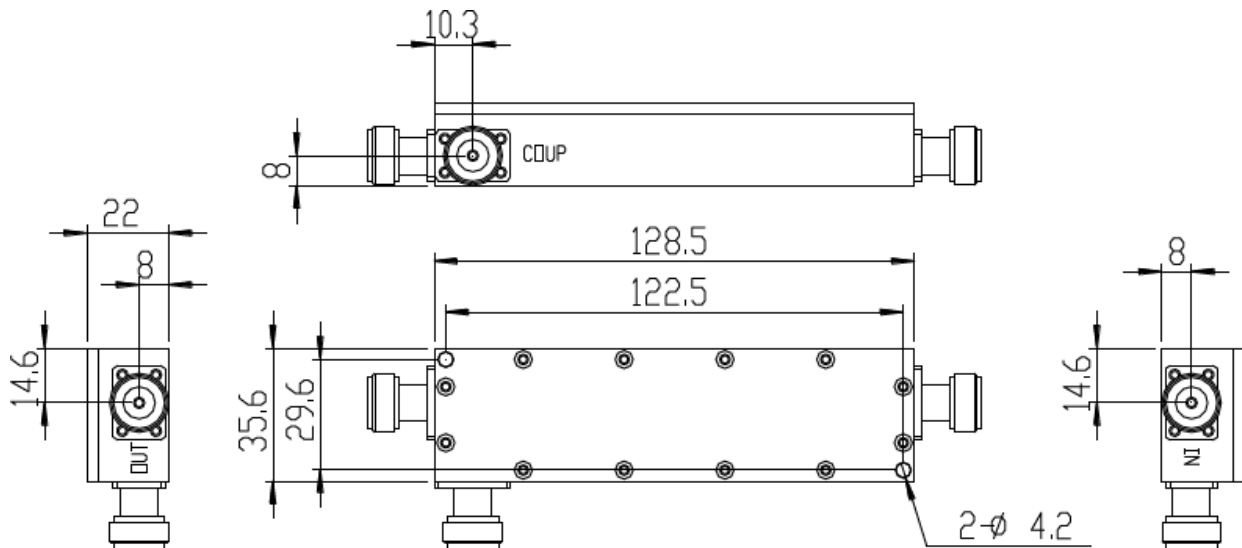
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INDOOR COUPLERS / SPLITTERS

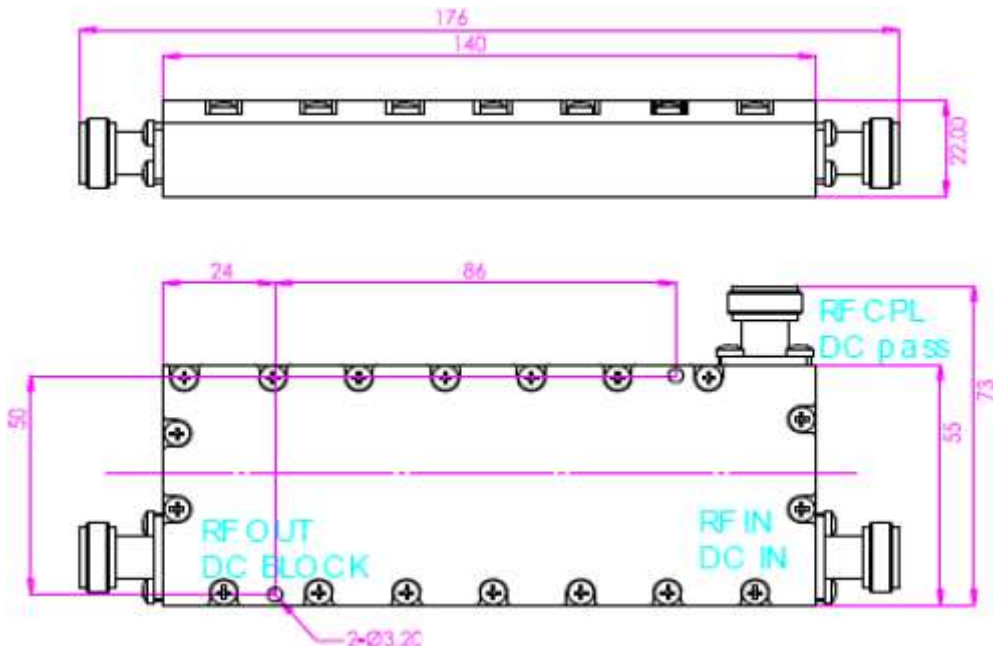
Balanced Power Splitters 380-520 MHz	SRFS 602 670	SRFS 602 671	SRFS 602 672
Type	1/2-1/2 Splitter	1/3-1/3-1/3 Splitter	1/4-1/4-1/4-1/4 Splitter
Frequency range	100 - 500 MHz		
Division Ratio	3.01 dB	4.8 dB	6 dB
Insertion Loss	≤ 3.5 dB	≤ 5.8 dB	≤ 7.0 dB
Isolation	≥ 14 dB	≥ 18 dB	≥ 18 dB
Ripple in-band	≤ ±0.3 dB	≤ ±0.3 dB	≤ ±0.4 dB
Input Return Loss	≥ 18 dB		
Amplitude Balance	≤ 0.3 dB		≤ 0.4 dB
Phase Balance	≤ 5°		
Impedance	50 Ω		
IM3	≤ -140 dBc @ +43 dBm x 2		
Connectors	N female		
Power Rating	100 W		
Temperature	-30°C / +70°C		
Dimensions	148x148x24 mm	264x185x23 mm	320x230x23
Weight	0.82 kg	1.80 kg	2.60 kg



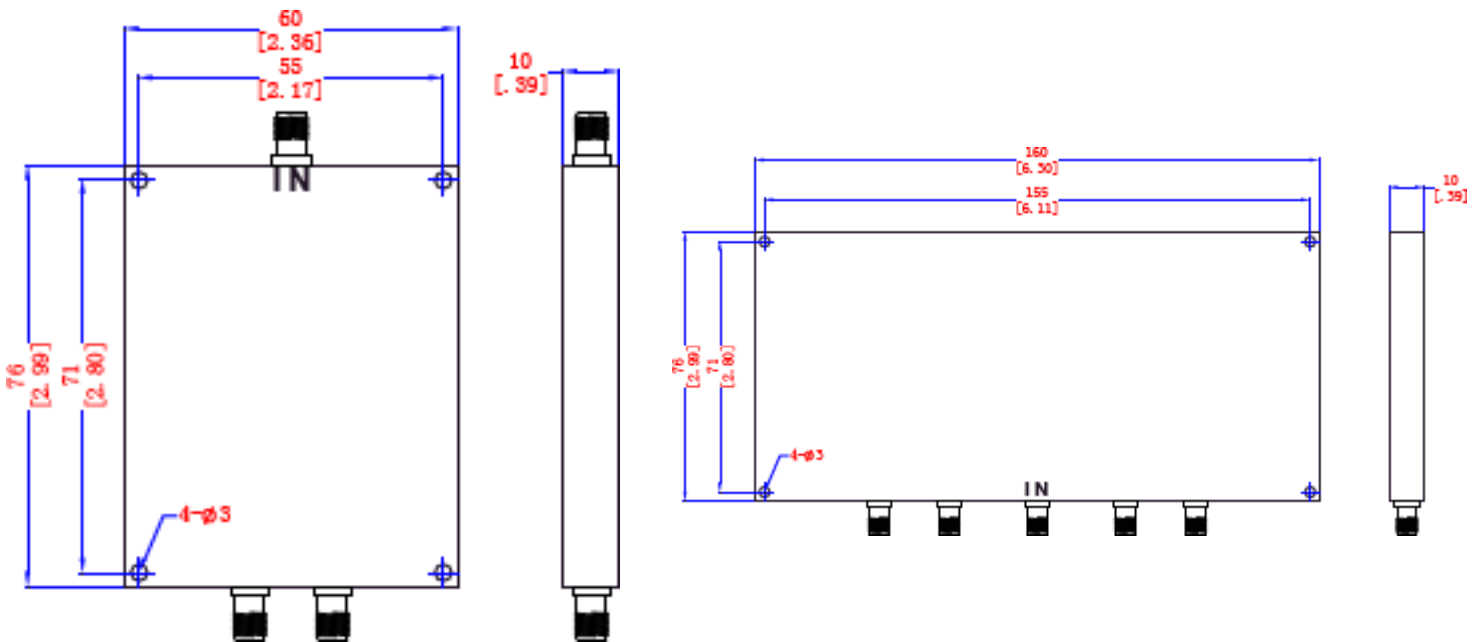
Unbalanced Power Splitters 380-520 MHz	SRFS 602 673	SRFS 602 674	SRFS 602 688	SRFS 602 675
Type	1/3-2/3 Splitter	1/4-3/4 Splitter	1/5-4/5 Splitter	1/10-9/10 Splitter
Frequency range	380 - 520 MHz			
Coupling	5.0 dB	6.0 dB	7.0 dB	10.0 dB
Insertion Loss	≤ 2.4 dB	≤ 1.95 dB	≤ 1.5 dB	≤ 1.0 dB
Ripple in-band	≤ ±1.0 dB			
Isolation	≥ 20 dB			
Return Loss	≥ 20 dB			
Impedance	50 Ω			
Connectors	N female			
Power Rating	50 W			
Temperature	-10°C / +50°C			
Size	128.5 x 35.6 x 22 mm ³			
Weight	0.24 kg			



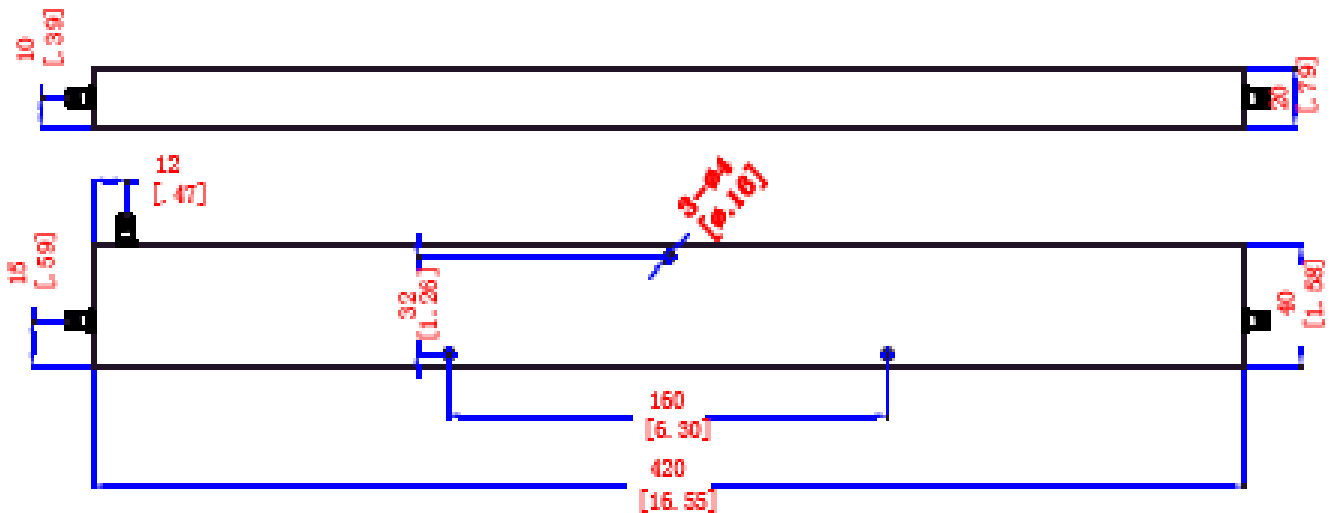
Special Coupler 10dB 380-520 MHz for Tetra Boosters	SRFS 602 669
DC Pass / DC Block	DC block on 9/10 access - DC pass on 1/10 access
Frequency range	380 - 520 MHz
Coupling	10.0 ± 1.0 dB
Insertion Loss	≤ 1.0 dB
Directivity	≥ 20 dB
VSWR	≤ 1.3
Impedance	50 Ω
Connectors	N female
Power Rating	200 W
Temperature	-25°C / +65°C
Size	140 x 55 x 22 mm ³
Weight	0.25 kg



Balanced Power Splitter 140 – 2000 MHz	SRFS 602 676	SRFS 602 677
Type	1/2-1/2 Splitter	1/4-1/4-1/4-1/4 Splitter
Frequency Range	140-2000 MHz	
Impedance	50 Ω	
Insertion Loss	≤ 1.3 dB	≤ 2.5 dB
VSWR	≤ 1.30	≤ 1.50
Isolation Rate	≥ 18 dB	
Connectors	SMA female	
Input Power	20 W	
Temperature	-20°C / +50°C	
Size	76 x 60 x 10 mm ³	76 x 160 x 10 mm ³
Weight	0.200 kg	0.400 kg



Directional Coupler 140 – 2000 MHz	SRFS 602 678
Type	1/10-9/10 Splitter
Frequency Range	140-2000 MHz
Impedance	50 Ω
Insertion Loss	≤ 1.0 dB
VSWR	≤ 1.40
Coupling	20 ± 1.5 dB
Connectors	SMA female
Input Power	20 W
Temperature	-20°C / +50°C
Size	420 x 14 x 10 mm ³
Weight	0.500 kg



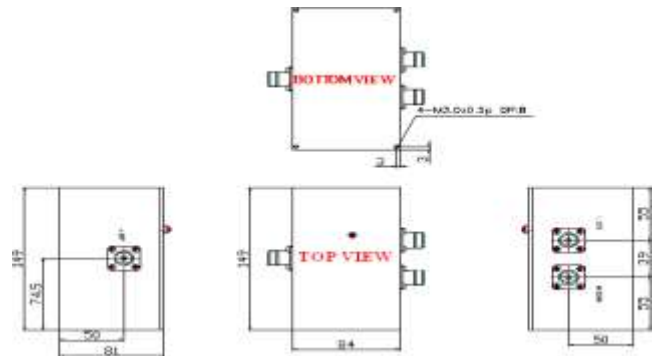
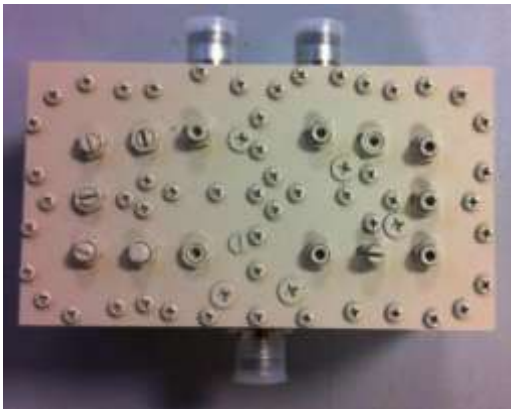
OUTDOOR COUPLERS

Directional Couplers 330-520 MHz	SRFS 602 689
Frequency range	330 - 520 MHz
Coupling	3.0 dB ± 0.3 dB
Isolation	≥ 36 dB
VSWR	≤ 1.06
Connectors	7/16 socket
Power Rating	≤ 1000 W
Temperature	-40°C / +70°C
Ingress Protection	IP 68
Weight	1.4 kg



DIPLXERS

TETRA DIPLEXER		SRFS 509 735	SRFS 509 654	SRFS 509 736
Frequency range	<i>Access 1</i>	380 - 400 MHz	410 – 430 MHz	380 - 400 MHz
	<i>Access 2</i>	410 – 430 MHz	450 – 470 MHz	450 – 470 MHz
Insertion loss			≤ 1 dB	
Ripple			≤ 0.7 dB	
Return loss			≥ 20 dB	
Rejection for each access			> 50 dB	
Input power			≤ 20 W	
Impedance			50 Ω nominal	
Dimensions	84 x 149 x 81 mm			
Weight	2 kg			
RF Connector	Nf			
Operating temperature	- 10°C to + 60°C			
Environmental Protection	IP 52 (indoor)			



ANTENNAS

Omni 380-470 MHz	SRFS 602 918	SRFS 602 919
Electrical Features		
Type	Colinear	
Frequency range	380-430 MHz	420-470 MHz
Impedance	50 Ω	
Radiation (H-plane) beamwidth @ -3dB	360° Omnidirectional	
Radiation (E-plane) beamwidth @ -3dB	40°	
Polarization	Linear Vertical	
Gain	5.15 dBi	
Max Power (CW) @ 30°C	75 W	
Grounding Protection	All metal parts are DC-grounded, the inner conductor shows a DC short	
Connector	N-female with rubber protection	
Mechanical Features		
Materials	White cylindrical fiberglass radome Ø28.6 mm, anodized 6063-T5 aluminum, brass, stainless steel, copper, EPDM rubber	
Wind Load @ 150 km/h	53 N	
Wind Resistance	180 Km/h	
Wind Surface	0.044 m²	
Height (approx..)	1380 mm	
Weight (approx..)	1215 g	1200 g
Temperature	-40°C / +80°C	
Mounting mast	Side mast whit "V" bolt Ø 35-54 mm	
Boom / Dipole / Element Diameter	Ø 32 mm / Ø 24 mm / Ø 12 mm	



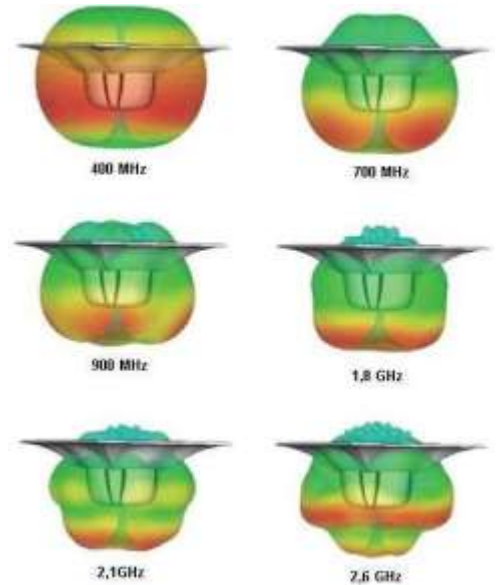
Wide-Band Yagi 380-470 MHz	SRFS 602679	SRFS 602680	SRFS 602681	SRFS 602682	SRFS 602683	SRFS 602684	SRFS 602685
Electrical Features							
Type	Dipole	3 elements Yagi		6 elements Yagi		10 elements Yagi	
Frequency range	380-470 MHz	380-440 MHz	400-470 MHz	380-440 MHz	400-470 MHz	380-440 MHz	400-470 MHz
Impedance	50 Ω						
Radiation (H-plane) beamwidth @ -3dB	200°	125°	125°	70°	70°	50°	50°
Radiation (E-plane) beamwidth @ -3dB	68°	65°	65°	55°	55°	45°	45°
Front to back ratio	≥ 8 dB	≥ 17 dB	≥ 17 dB	≥ 17 dB	≥ 17 dB	≥ 18 dB	≥ 18 dB
Polarization	Linear Vertical	Linear Vertical or Horizontal					
Gain	4.5 dBi	7 dBi	7 dBi	11 dBi	11 dBi	14 dBi	14 dBi
Max Power (CW) @ 30°C	150 W						
Grounding Protection	All metal parts are DC-grounded, the inner conductor shows a DC short						
Connector	N-female with rubber protection						
Mechanical Features							
Materials	Anodized 6063-T5 Aluminium, PDM rubber, thermoplastic UV stabilized, Chromed Brass						
Wind Load @ 150 km/h	48 N	65 N	63 N	100 N	96 N	150 N	142 N
Wind Resistance	200 Km/h	180 Km/h	180 Km/h	150 Km/h	150 Km/h	120 Km/h	120 Km/h
Wind Surface	0.033 m ²	0.048 m ²	0.047 m ²	0.078 m ²	0.075 m ²	0.121 m ²	0.115 m ²
Dimensions W x h	380 x 340 mm	565 x 400 mm	525 x 375 mm	1180 x 400 mm	1130 x 375 mm	2125 x 400 mm	2000 x 375 mm
Turning radius	240 mm	460 mm	420 mm	1050 mm	1000 mm	1990 mm	1860 mm
Weight	950 g	1130 g	1100 g	1540 g	1490 g	2120 g	2040 g
Temperature	-40°C / +60°C						
Mounting mast	Ø 35-52 mm						
Boom / Dipole / Element Diameter	Ø 32 mm / Ø 24 mm / Ø 12 mm						



TETRA Indoor Ceiling Mount Antenna 380-430 MHz	SRFS 602 686
Electrical Features	
Frequency range	380 - 430 MHz
Impedance	50 Ω
VSWR	≤ 2.0:1
Power Rating	50 W
Polarization	Vertical
Forward gain	2 dBi
Radiation (H-plane) beamwidth @ -3dB	360°
Radiation (E-plane) beamwidth @ -3dB	90°
IM3	≤ -140 dBc @ +37 dBm x 2
Mechanical Features	
Connector	N female
Element	FR4 Printed Circuit
Radome	ABS White Fire Retardant
Size	Ø 231 mm / h 81 mm
Weight	400 g



Broadband Indoor Ceiling Mount Antenna 380-2600 MHz	SRFS 602 693		
Electrical Features			
Frequency range	380 - 2600 MHz		
Impedance	50 Ω		
VSWR	≤ 2.3:1		
Power Rating	25 W		
Polarization	Vertical		
Forward gain	1 dBi @ 400 MHz	4.5 dBi @ 900 MHz	6.5 dBi @ ≥ 1800 MHz
Radiation	Omnidirectional		
Mechanical Features			
Connector	N female		
Radome	ABS White		
Size	175mm x 420mm x 420mm		



TETRA Indoor Wall Mount Antenna 380-470 MHz	SRFS 602 687
Electrical Features	
Frequency range	380 - 470 MHz
Impedance	50 Ω
VSWR	≤ 2.0:1
Front to back ratio	8 dB
Power Rating	50 W
Polarization	Vertical & Horizontal
Forward gain	4 dBi
Radiation (H-plane) beamwidth @ -3dB	130°
Radiation (E-plane) beamwidth @ -3dB	120°
IM3	≤ -140 dBc @ +37 dBm x 2
Mechanical Features	
Connector	N female
Materials	Aluminium, PTFE
Radome / Fasteners	ABS White Fire Retardant / Stainless Steel A2-70
Size	30 cm x 32 cm x 14 cm
Weight	400 g



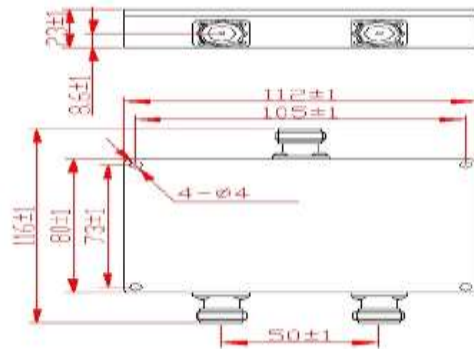
SPLITTER

MICROSTRIP SPLITTER

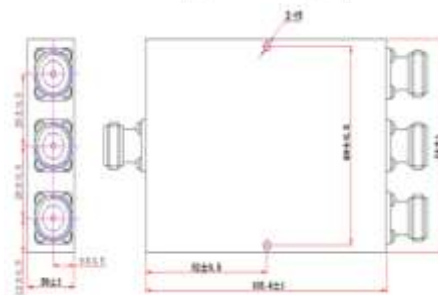
Specification	2 Way	3 Way	4 Way
Characteristics Impedance	50	50	50
Frequency Range	150 – 1000 MHz	150 – 1000 MHz	150 – 1000 MHz
Insertion loss	≤ 3.4dB	≤ 3.4dB	≤ 3.4dB
VSWR	≤ 1.3	≤ 1.3	≤ 1.3
Isolation	≥18 dB	≥18 dB	≥18 dB
PM3	≤-150dBc@2×43dBm	≤-150dBc@2×43dBm	≤-150dBc@2×43dBm
Power	50W	50W	50W
Connector	N-F	N-F	N-F
Operating Temperature	-20~+85°C	-20~+85°C	-20~+85°C
Relative Humidity	5%~95%	5%~95%	5%~95%
Appearance	Black Paint	Black Paint	Black Paint
Application	Indoor / Outdoor	Indoor / Outdoor	Indoor / Outdoor



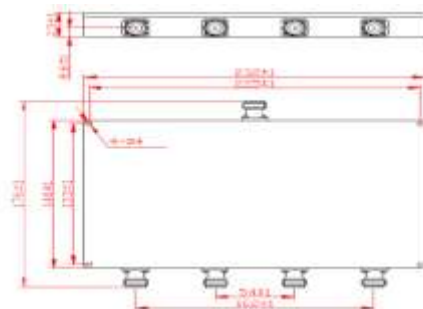
2 WAY



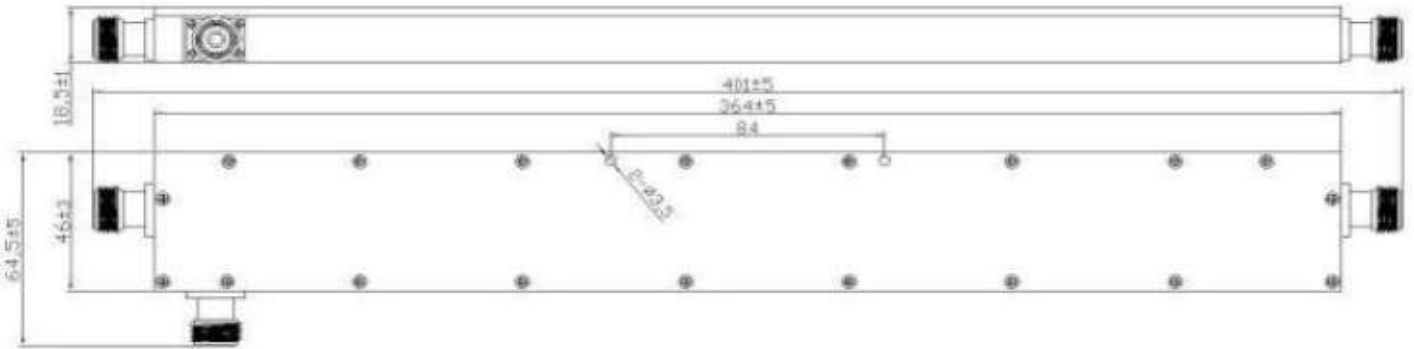
3 WAY



4 WAY



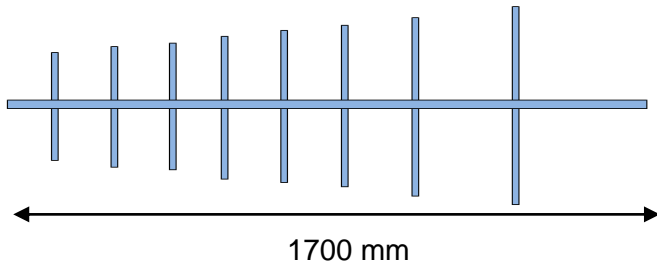
DIRECTIONAL COUPLER



Electrical and Mechanical Specification

Model No.	SRFS-110-03-NF SRFS-110-05-NF	SRFS-110-06-NF SRFS-110-07-NF	SRFS-110-08-NF	SRFS-110-10-NF SRFS-110-13-NF	SRFS-110-15-NF	SRFS-110-20-NF SRFS-110-30-NF
Coupling(dB)	3/5	6/7	8	10/13	15	20/30
IL(dB)	≤3.65/≤2.2	≤1.75/≤1.45	≤1.35	≤0.9/≤0.7	≤0.5	≤0.4/≤0.4
Accuracy(dB)	±1.3/±1.4	±1.5/±01.7	±1.8	±2.0/±2.0	±2.0	±2.0/±2.5
Isolation(dB)	≥18/≥19	≥21/≥22	≥23	≥25/ ≥28	≥30	≥45
Frequency	150 ~ 1000 MHz					
VSWR	≤ 1.30					
Power	200 (Average) W					
Impedance	50 Ω					
Connector	N-Female					
Color	Red-painted					
Temp.	-35°C ~ +65°C					
Application	Indoor & Outdoor IP65					
Humidity	5% ~ 95%					
Dimesions	401 mm*64.5mm*18.5mm(Connectors included)					

UHF ANTENNAS



Design Features

Yagi antenna design reflects innovative modern antenna construction. The unique design of the Yagi antenna feed which works as matching device to keep the VSWR low resulting in increased efficiency of the Yagi antenna. The mounting hardware supplied facilitates mounting on either vertical or horizontal members. The Yagi antenna comes in pre-assembled condition with permanently fixed elements in the support boom. The small surface area on the Yagi antenna minimizes wind resistance and conserves tower loading capacity.

12 dBi YAGI ANTENNA

TECHNICAL SPECIFICATIONS	
Frequency Range	328 ~ 367 MHz
Gain	12 dBi
V.S.W.R	1.5 : 1
Polarization	Vertical or Horizontal
Impedance	50 Ohm
Lightning Protection	DC Ground
Maximum Input Power	500 W
Radiation Pattern	Directional
Horizontal Beam-width	40°
Front to Back Ratio	20 dB
Input Termination	N - Female
MECHANICAL SPECIFICATION	
No. of Elements	8 Elements
Materials	Aluminum Alloy
Mounting Hardware	Stainless Steel
Weight	3.5 Kg
Antenna Length	170 cm
Wind Rating	200 km/hr
Radiation Material	Brass
Elements Materials - Outer Diameter	Aluminum Round Tube – 12.7 mm
Support Boom Materials - Outer Diameter	Aluminum Square Tube – 25 mm
Maximum Mounting pipe Diameter	50 mm
ENVIRONMENTAL SPECIFICATION	
Operating Temperature	-30 ~ +70 °C
Storage Temperature	-40 ~ +80 °C
Humidity	0 to 95% RH

Construction

Structure of SRFS 350 Yagi antenna has been constructed in high quality 6063T6 aluminum alloys to prevent corrosion. The Yagi antenna is supplied with N female connector. This directional Yagi antenna comes factory tuned and does not require any field adjustment

9 dBi YAGI ANTENNA



Design Features

Yagi antenna design reflects innovative modern antenna construction. The unique design of the Yagi antenna feed which works as matching device to keep the VSWR low resulting in increased efficiency of the Yagi antenna. The mounting hardware supplied facilitates mounting on either vertical or horizontal members. The Yagi antenna comes in pre-assembled condition with permanently fixed elements in the support boom. The small surface area on the Yagi antenna minimizes wind resistance and conserves tower loading capacity.

TECHNICAL SPECIFICATIONS

Frequency Range	400 ~ 480 MHz
Gain	9 dBi
V.S.W.R	2 : 1
Polarization	Vertical or Horizontal
Impedance	50 Ohm
Lightning Protection	DC Ground
Max. Input Power Capacity	500 W
Radiation Pattern	Directional
Horizontal Beam-width	65°
Vertical Beam - width	45°
Front to Back Ratio	20 dB
Input Termination	N - Female

MECHANICAL SPECIFICATION

No. of Elements	5 Elements
Materials	Aluminum Alloy
Mounting Hardware	Stainless Steel
Weight	2 Kg
Antenna Length	60 cm
Wind Rating	210 km/hr
Radiation Material	Brass
Elements Materials - Outer Diameter	Aluminum Round Tube – 19 mm
Support Boom Materials - Outer Diameter	Aluminum Square Tube – 25 mm
Maximum Mounting pipe Diameter	50 mm (2 inches)

ENVIRONMENTAL SPECIFICATION

Operating Temperature	-30 ~ +70 °C
Storage Temperature	-40 ~ +80 °C
Humidity	0 to 95% RH

Construction

Structure of SRFS-440 yagi antenna has been constructed in high quality 6063T6 aluminium alloys to prevent corrosion. The Yagi antenna is supplied with N female connector. This directional yagi antenna comes factory tuned and does not require any field adjustment.

LOG PERIODIC DIPOLE ANTENNA



Frequency: 150~500 MHz / Gain: 9 dBi

Design Features

The SRFS150-500 log periodic antenna is designed to provide wideband directional transmission/reception of horizontal or vertical radio signals from 150-500 MHz bands. The extra spacers are used between the support booms to improve mechanical durability of antenna. The specially designed mounting arrangement results in fast installation. This log periodic dipole antenna system is particular suitable for transmission, reception, monitoring, scanning and jamming applications due to its capability of receiving/transmitting both the E & H signals (one at a time). This high gain LP provides strong performance over the entire frequency of 150-does not use loading technique to reduce the overall size of array.

TECHNICAL SPECIFICATIONS

Frequency Range	150 ~ 500 MHz
Gain	9 dBi
Bandwidth	Entire Band
Polarization	Vertical or Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width-half power points	60 – Horizontal
Front to Back Ratio	16 dB
VSWR	2.5: 1
RF Power Handling Capacity	250 Watts
Input Termination	N – Female
Lightning Protection	Direct Ground
Mecanical Specifications	
Support booms & Radiating Elements Material	Aluminum Alloy 6063T6
Mounting Hardware Nut and Bolts	Stainless Steel
Net. Weight Approx	6 Kg
Overall length	1 Mtr
Overall Width	1.1 Mtr
Wind Rating	200 km/hr
Elements Material – cross section	Aluminium Round Table
Support Boom Materials - Cross section	Aluminium Round Square table
Mounting Clamps Position	At back end of the support boom
Maximum Mounting pipe Diameter	51 mm (2 inches)
Environmental Specification	
Operating Temperature	-30 °C ~ +70 °C
Storage Temperature	-30 °C ~ +80 °C
Humidity	0 + 95% RH

Construction

The SRFS 150-500 assembled log periodic antennas outer-most dimensions are 1 meters (3.5 feet) long and 1.1 meters (3.5 feet) width & height. The antenna has foldable elements, the longest of which is 0.5 meter. All elements are supplied in two segments for easy of shipping and handling. The elements are attached via a fast deployment self-locking device at points along the boom. The log periodic antenna operates at D.C. ground with low resistance discharge path for protection against lightning and immunity to noise. All the screws, nuts and bolts of log periodic dipole antenna are made of stainless steel.

LOG PERIODIC DIPOLE ANTENNA



LOG PERIODIC DIPOLE ANTENNA (SRFS 150-500)
Frequency: 150~500 MHz / Gain: 12 dBi

Design Features

The SRFS150-500 log periodic antenna is designed to provide wideband directional transmission/reception of horizontal or vertical radio signals from 150-500 MHz bands. The extra spacers are used between the support booms to improve mechanical durability of antenna. The specially designed mounting arrangement results in fast installation. This log periodic dipole antenna system is particular suitable for transmission, reception, monitoring, scanning and jamming applications due to its capability of receiving/transmitting both the E & H signals (one at a time). This high gain LP provides strong performance over the entire frequency of 150-does not use loading technique to reduce the overall size of array.

TECHNICAL SPECIFICATIONS

Frequency Range	150 ~ 500 MHz
Gain	12 dBi
Bandwidth	Entire Band
Polarization	Vertical or Horizontal
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width-half power points	60 – Horizontal
Front to Back Ratio	16 dB
VSWR	2.5: 1
RF Power Handling Capacity	250 Watts
Input Termination	N – Female
Lightning Protection	Direct Ground

Mecanical Specifications

Support booms & Radiating Elements Material	Aluminum Alloy 6063T6
Mounting Hardware Nut and Bolts	Stainless Steel
Net. Weight Approx	6 Kg
Overall length	1 Mtr
Overall Width	1.1 Mtr
Wind Rating	200 km/hr
Elements Material – cross section	Aluminium Round Table
Support Boom Materials - Cross section	Aluminium Round Square table
Mounting Clamps Position	At back end of the support boom
Maximum Mounting pipe Diameter	51 mm (2 inches)

Environmental Specification

Operating Temperature	-30 °C ~ +70 °C
Storage Temperature	-30 °C ~ +80 °C
Humidity	0 + 95% RH

Construction

The SRFS 150-500 assembled log periodic antennas outer-most dimensions are 1 meters (3.5 feet) long and 1.1 meters (3.5 feet) width & height. The antenna has foldable elements, the longest of which is 0.5 meter. All elements are supplied in two segments for easy of shipping and handling. The elements are attached via a fast deployment self-locking device at points along the boom. The log periodic antenna operates at D.C. ground with low resistance discharge path for protection against lightning and immunity to noise. All the screws, nuts and bolts of log periodic dipole antenna are made of stainless steel.



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