

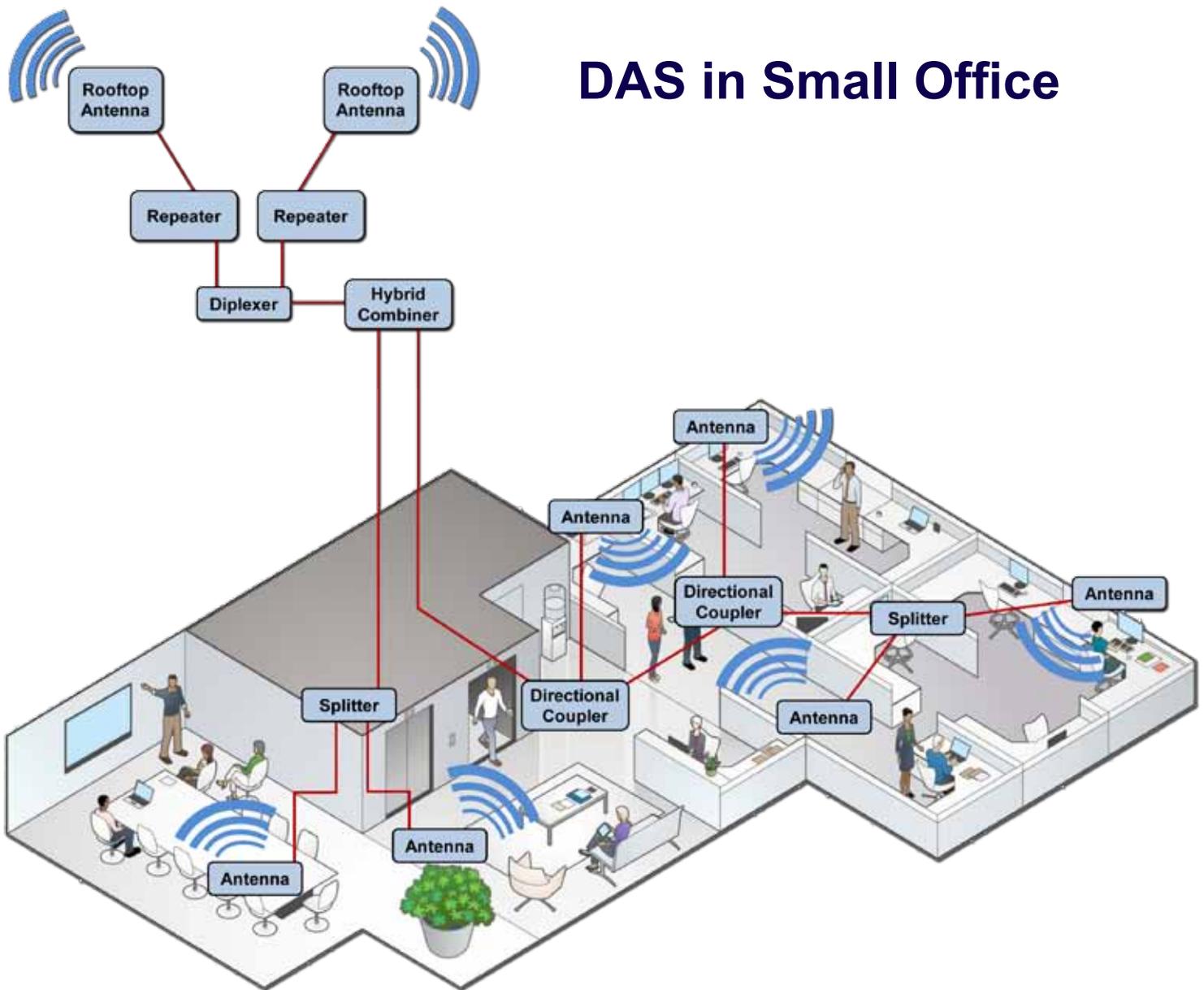
DAS Components



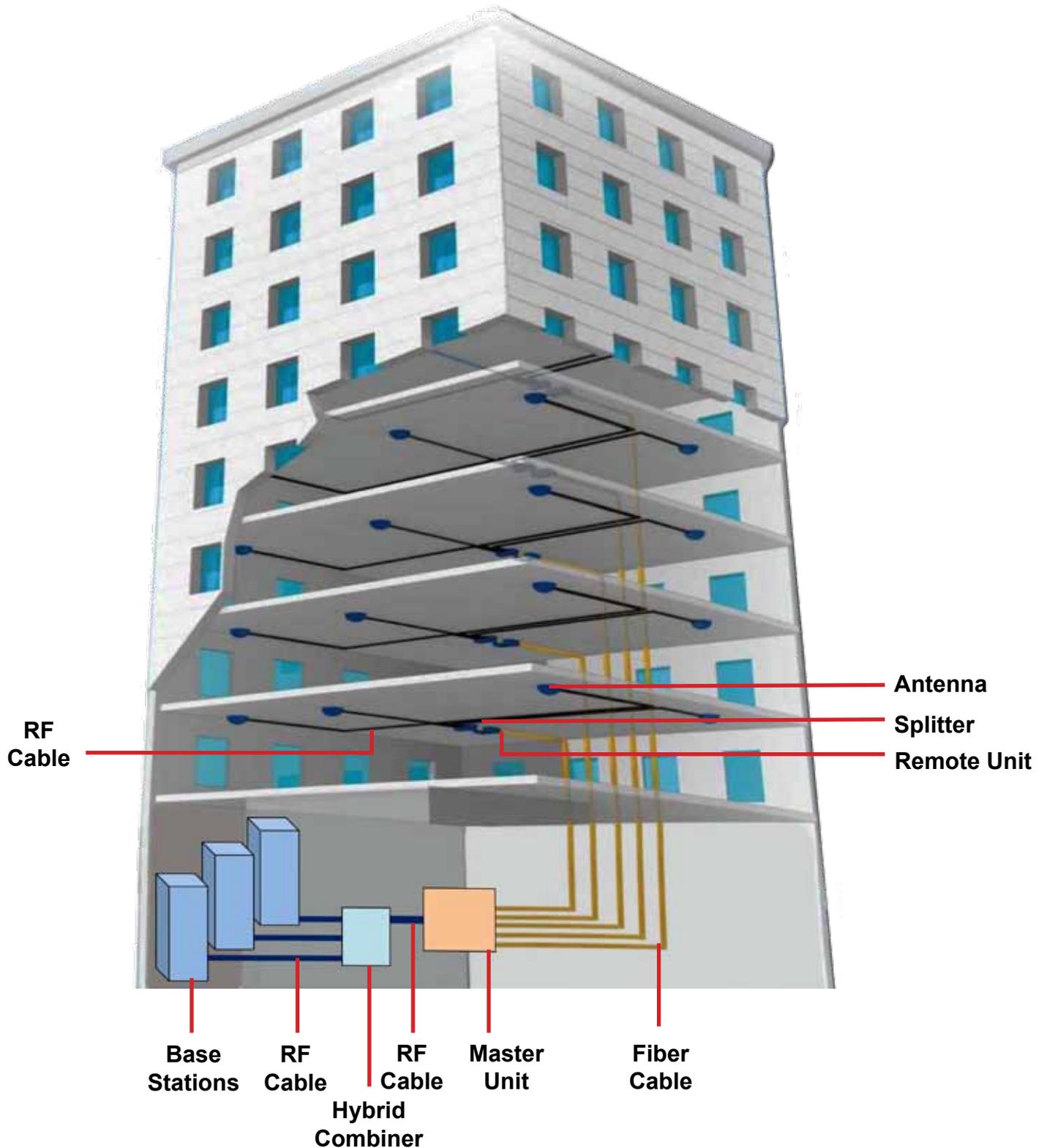
With the development of modern wireless communication technologies such as GSM, CDMA, WCDMA, WLAN, WiMAX and LTE over wider spectrum ranges including 700 MHz, 850 MHz, 1900 MHz, 2100 MHz, and 2600 MHz, more and more wireless networks are deployed requiring wideband universal passive components. Rosenberger Site Solutions (RSS) supplies a complete range of passive component products for Distributed Antenna Systems (DAS) and in-building coverage systems including Couplers, Splitters, Hybrid Couplers, Duplexers, Filters, Diplexers and Triplexers for the latest network topologies.

DAS applications as depicted in the following two application diagrams require a vast array of components to construct a well balanced and reliable system. RSS can supply all the interconnect products you need from splitters and directional couplers to fiber, RF cables, and antennas.

DAS in Small Office



DAS in Building



	<u>ITEM</u>	<u>Page #</u>
	Splitters	5
	Directional Couplers	6
	Hybrid Combiners	7
	Terminations	8
	Attenuators	9
	Combiners	10
	Duplexers	10
	In-Building Antennas	11
	DAS Cabling & Distribution	12

Cavity Splitters

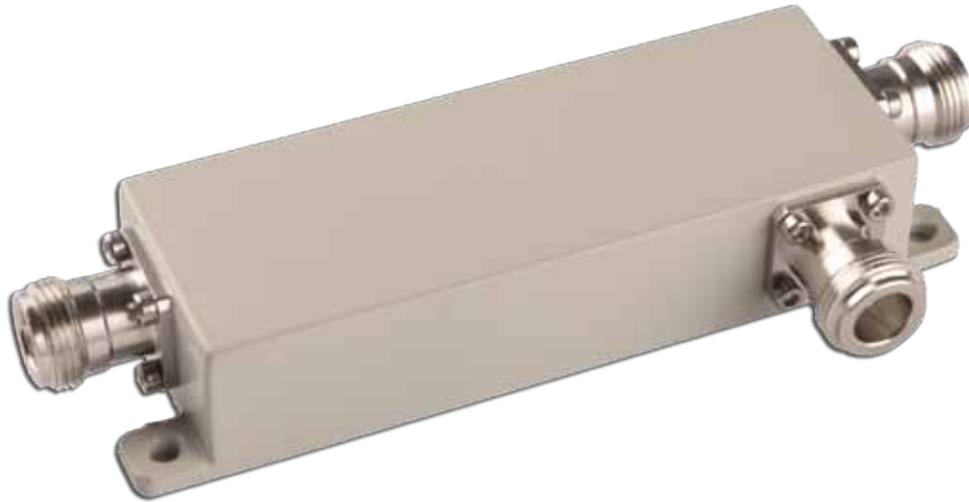
Manufactured in 2 through 4 way, with custom 5 and 6 way versions also available for special order, Rosenberger's cavity splitters are designed for best in class performance and value. Covering the entire frequency range from 698-2700 MHz with PIM performance greater than -153 dBc, these splitters achieve the requirements needed for use in DAS applications.



Part #	Number of splits	Frequency (MHz)	Loss (dB)		VSWR	Power Rating (W)		Weight		Connector
			Split	Insertion		Average	Peak	lbs	kgs	
S-2-8F-DF	2	698-2700	3.0	± 0.2	< 1.2	300	1500	2.3	1.04	7-16 DIN Female
S-3-8F-DF	3	698-2700	4.8	± 0.2	< 1.3	300	1500	2.7	1.24	7-16 DIN Female
S-4-8F-DF	4	698-2700	6.0	± 0.2	< 1.3	300	1500	3.0	1.35	7-16 DIN Female
S-2-8F-NF	2	698-2700	3.0	± 0.2	< 1.2	300	1500	0.8	0.38	N Female
S-3-8F-NF	3	698-2700	4.8	± 0.2	< 1.3	300	1500	0.9	0.41	N Female
S-4-8F-NF	4	698-2700	6.0	± 0.2	< 1.3	300	1500	1.0	0.45	N Female

Directional Couplers

Directional couplers are used to divide an input signal into two proportional power levels. Manufactured in 5 dB to 40 dB coupling ratios, the value needed for most applications is readily available. Designed with minimal internal connections, these couplers have a PIM specification of -153 dBc, low VSWR, and high isolation.



Part #	Frequency Band (MHz)	Loss (dB)		VSWR	Power Rating (W)		Weight		Connector
		Coupling	Insertion		Average	Peak	lbs	kgs	
DC-5-8F-DF	698-2700	5.0 ± 1.0	2.1	≤ 1.25	200	1000	0.7	0.34	7-16 DIN Female
DC-6-8F-DF	698-2700	6.0 ± 1.0	1.6	≤ 1.25	200	1000	0.7	0.34	7-16 DIN Female
DC-8-8F-DF	698-2700	8.0 ± 1.0	1.1	≤ 1.25	200	1000	0.7	0.34	7-16 DIN Female
DC-10-8F-DF	698-2700	10.0 ± 1.0	0.7	≤ 1.25	200	1000	0.7	0.34	7-16 DIN Female
DC-13-8F-DF	698-2700	13.0 ± 1.1	0.4	≤ 1.25	200	1000	0.7	0.34	7-16 DIN Female
DC-15-8F-DF	698-2700	15 ± 1.0	0.4	≤ 1.25	200	1000	0.7	0.34	7-16 DIN Female
DC-20-8F-DF	698-2700	20 ± 1.0	0.3	≤ 1.25	200	1000	0.7	0.34	7-16 DIN Female
DC-30-8F-DF	698-2700	30 ± 1.5	0.2	≤ 1.25	200	1000	0.7	0.34	7-16 DIN Female
DC-5-8F-NF	698-2700	5.0 ± 1.0	2.1	≤ 1.25	200	1000	0.7	0.34	N Female
DC-6-8F-NF	698-2700	6.0 ± 1.0	1.6	≤ 1.25	200	1000	0.7	0.34	N Female
DC-8-8F-NF	698-2700	8.0 ± 1.0	1.1	≤ 1.25	200	1000	0.7	0.34	N Female
DC-10-8F-NF	698-2700	10.0 ± 1.0	0.7	≤ 1.25	200	1000	0.7	0.34	N Female
DC-13-8F-NF	698-2700	13.0 ± 1.1	0.4	≤ 1.25	200	1000	0.7	0.34	N Female
DC-15-8F-NF	698-2700	15 ± 1.0	0.4	≤ 1.25	200	1000	0.7	0.34	N Female
DC-20-8F-NF	698-2700	20 ± 1.0	0.3	≤ 1.25	200	1000	0.7	0.34	N Female
DC-30-8F-NF	698-2700	30 ± 1.5	0.2	≤ 1.25	200	1000	0.7	0.34	N Female

Hybrid Combiners

Available in either broadband or band specific versions, these hybrid combiners allow for the combining of multiple technologies within the same band. The excellent PIM performance of -153 dBc, low insertion loss, and low VSWR make these combiners an excellent choice for DAS and in-building applications.



Part #	Number of Ports In/Out	Frequency Band (MHz)	Loss (dB)		VSWR	Power Rating (W)		Weight		Connector
			Split	Imbalance		Average	Peak	lbs	kgs	
HM-3-8F-NF	2/2	698-2700	3.0	± 0.4	< 1.25	200	1000	1.1	0.5	N Female
HM-3-8F-DF	2/2	698-2700	3.0	± 0.4	< 1.25	200	1000	1.1	0.5	7-16 DIN Female
HM-3-AF-DF-02	4/2	800-960	3.0	± 0.2	< 1.2	250	1250	11.0	5.0	7-16 DIN Female
HM-42-8F-DF	4/2	698-2700	6.8	± 1.0	< 1.3	*50	500	11.0	5.0	7-16 DIN Female

* Power rating is per port

Terminations

Rosenberger broadband terminations offer a wide frequency bandwidth, low VSWR, and power handling ranges up to 200 Watts.



Part #	Frequency Band (MHz)	VSWR	Power Rating (W)		Connector (XX)
			Average	Peak	
L-2-XX	DC-3000	< 1.15	2	20	DM = 7-16 DIN Male DF = 7-16 DIN Female NM = N Male NF = N Female
L-5-XX	DC-3000	< 1.15	5	50	
L-10-XX	DC-3000	< 1.15	10	100	
L-15-XX	DC-3000	< 1.15	15	150	
L-20-XX	DC-3000	< 1.15	20	200	
L-25-XX	DC-3000	< 1.20	25	250	
L-30-XX	DC-3000	< 1.20	30	300	
L-50-XX	DC-3000	< 1.20	50	500	
L-100-XX	DC-3000	< 1.25	100	1000	
L-150-XX	DC-3000	< 1.25	150	1500	
L-200-XX	DC-3000	< 1.25	200	2000	

Attenuators

Rosenberger Site Solutions offer a wide range of attenuation values and power levels with wide bandwidth and low VSWR.



Model Number	Frequency (MHz)	VSWR	Power Rating (W)		Attenuation value (XX) & Accuracy (dB)					Connector
			Average	Peak	1-9	10	20	30	40	
A-XX-2-N	DC-3000	1.20	2	20	±0.40	±0.50	±0.50	±0.60	±0.60	N Male to N Female
A-XX-5-N	DC-3000	1.20	5	50	±0.40	±0.50	±0.50	±0.60	±0.60	N Male to N Female
A-XX-10-N	DC-3000	1.20	10	100	±0.40	±0.50	±0.60	±0.60	±1.00	N Male to N Female
A-XX-25-N	DC-3000	1.20	25	250	±0.40	±0.50	±0.60	±0.60	±1.00	N Male to N Female
A-XX-50-N	DC-3000	1.20	50	500	±0.60	±0.60	±0.60	±0.75	±1.00	N Male to N Female
A-XX-50-D	DC-3000	1.20	50	500	±0.60	±0.60	±0.60	±0.75	±1.00	7-16 DIN Male to 7-16 DIN Female
A-XX-100-N	DC-3000	1.35	100	1000	---	±0.50	±1.00	±1.20	±1.50	N Male to N Female
A-XX-100-D	DC-3000	1.30	100	1000	---	±0.60	±0.60	±0.75	±0.75	7-16 DIN Male to 7-16 DIN Female
A-XX-150-N	DC-3000	1.30	150	1500	---	±1.50	±1.00	±0.80	±0.80	N Male to N Female
A-XX-150-D	DC-3000	1.30	150	1500	---	±1.50	±1.00	±0.80	±0.80	7-16 DIN Male to 7-16 DIN Female
A-XX-200-N	DC-3000	1.35	200	2000	---	±1.25	±1.25	±0.80	±0.80	N Male to N Female
A-XX-200-D	DC-3000	1.35	200	2000	---	±1.25	±1.25	±0.80	±0.80	7-16 DIN Male to 7-16 DIN Female

Combiners / Duplexers

Combiners: Diplexers / Triplexers / Quadplexers

Rosenberger frequency combiners are used in applications that require feeder sharing or co-siting. Built for both indoor and outdoor applications, these low loss combiners are available as single units or, for cross pole antennas, as double units. DC blocks can be added as an option. Available in either wall or pole mount, these units are 100% tested for a PIM performance of -153 dBc..



Duplexers

Rosenberger duplexers feature high isolation, low VSWR and low insertion loss to ensure the uplink and downlink signals do not interact. These duplexers are designed for high reliability with electrical performance maintained over temperature, humidity, and vibration. These units are tested for a PIM performance of -153 dBc.



Part#	Frequency Bands (MHz)*	Loss (dB)	VSWR	Average Power Rating (W)	Connector
CB-2-PW-DF-01	P / W	≤ 0.5 / 0.5	≤ 1.3	200	7-16 DIN Female
CB-2-C-NF-01	LL / C	≤ 0.6 / 0.6	≤ 1.3	200	N Female
CB-2-LH-NF-01	L / H	≤ 0.5 / 0.5	≤ 1.3	150	N Female
CB-2-FM-DF-03	F / M	≤ 0.2 / 0.2	≤ 1.3	150	7/16 DIN Female
CB-4-LCAP-DF-01	LT / C / A / P	≤ 0.4 / 0.4 / 0.7 / 0.65	≤ 1.22	250	7-16 DIN Female

* Letter	* Frequency Band
P	1850-1990
C	824-894
W or A	1710-1755 / 2110-2155
F	380-2170
M	2400-2700
H	1710-2700
L	790-960
LT	698-787
LL	698-806

In-Building Antennas

These broadband antennas are used for indoor applications. Available in both MIMO and SISO versions, these antennas cover all four US cellular bands in a compact size. Mounting is to either ceiling or wall.

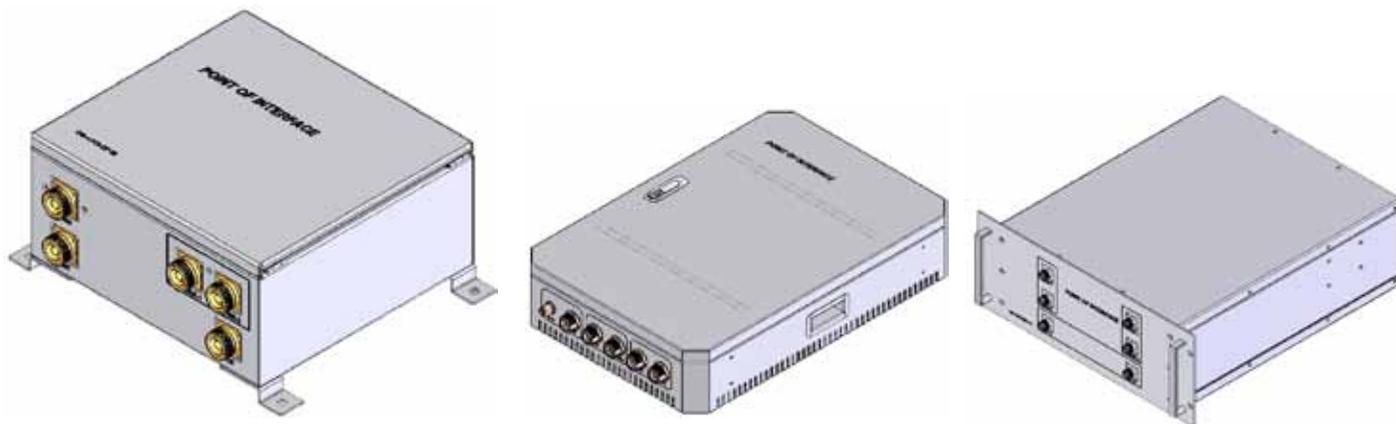


Part #	Antenna Type	Frequency Band (MHz)	Gain (dBi)	Horizontal Beamwidth	VSWR	Power Rating (W)	Weight		Connector
							lbs	kgs	
S-Wave 8FW-OD-3	Omni	698-960/ 1710-2700	3	360°	< 1.25	50	0.6	0.28	N Female
S-Wave 8FW-90-8	Panel	698-960/ 1710-2700	8	95°	< 1.2	50	1.1	0.50	N Female
S-Wave 8FW/EW-65-8	Panel/ MIMO	698-960/ 1710-2700	8	65°	< 1.8	50	1.8	0.8	2 x N Female
S-Wave 8FW/EW-OD-3	Omni/ MIMO	698-960/ 1710-2700	3	360°	< 1.8	50	1.8	0.8	2 x N Female

Custom Products

Can't find the product you need? Rosenberger Site Solutions can work with you to design and manufacture custom products for unique requirements. With experience designing filters, active products, antennas, passive components, and cable, we can create custom products combining these technologies such as integrated antennas, points of Interface, and custom DAS equipment.

Contact us at 1.866.598.5250 or rlss@rlss.us to discuss your ideas.



DAS Cabling



Rosenberger Site Solutions (RSS) supplies a complete range of cabling and distribution component products for Distributed Antenna Systems (DAS) and in-building coverage systems.

Offering Includes:

- Fiber Products
- Copper Products
- Distribution Products

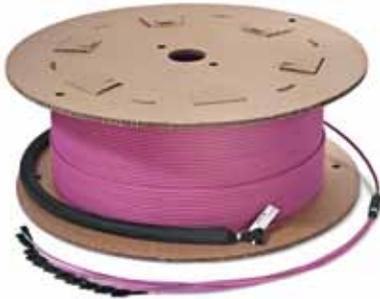


FIBER PRODUCTS

PreCONNECT® Fiber Trunk

The Rosenberger PreCONNECT® cabling system consists of pre-connected loose tube cables with up to 144 fibers – called “Trunk”. The PreCONNECT® Fiber Trunks are deployed for Infrastructure cabling of DAS installations, office buildings and campus structures.

Properties



- Both sides factory assembled with FO connectors
- Standard light propagation “channelwise crossed” (pairwise flipped)
- Cable length up to 2,000 m, longer on request
- Cable Types: With all standard loose tube cables up to 144 fibers available
- Connectors: With all standard connectors available, simplex as well as duplex versions
- Installation Tube installed on both ends (Indoor/Outdoor Type)
- Order length: Length between the connectors at the longest legs at both sides (not between the cable dividers)



Installation Tube Indoor, IP50 dust-proof



Installation Tube Outdoor, IP67 water-proof

Fiber Patchcords



Applications

- Patchcords appropriate for use in DAS installations, data centers and office buildings
- Patchcords for other applications on request

Properties

- Optimized kink and crush resistance with regards to application requirements
- Operating temperature range -10 °C to +60 °C
- Standard light propagation:
- Full-duplex-cables: duplex connectors at both sides acc. to ISO /IEC 11801 and EN 50173 = “crossed” (flipped)
- Half-duplex-cables: duplex-connector at one side and 2 x simplex at the other side = “uncrossed” (unflipped)
- Duplex-cables: with simplex connectors at both sides = “uncrossed” (unflipped)
- Cable Types: Plenum and Riser variants
- Fiber Types: All standard fiber types
- Connectors: All standard connectors available

COPPER PRODUCTS

PreCONNECT® Copper Trunk Multi Jumper



Applications

- 6 channel copper data cable assembled on both sides with RJ45 connectors or jack modules ready-for-connection, particular in data center installations

Properties

- Appropriate for 4 connector channel 10 GBE class EA, but only 60 m
- Leg length 30 cm for cables with jack modules, stepped leg lengths also available
- Leg length for cables with connectors to be selected
- Cable Types:
 - 6 single stranded Cat.7 S / FTP copper data cables taped with a self-extinguishing, halogen-free and transparent foil tape
 - Flex braid wire AWG 26 with screened pairs and overall copper braid
 - Cable diameter 17.6 mm
- Connectors: RJ45, screened Cat. 6
- Jack Modules:
 - RJ45, screened Cat. 6A
 - Suited for standard keystone holes

Copper Patchcords

Rosenberger offers patch cords for PreCONNECT Copper Trunk / Multi Jumper.



Properties

- Screened Cat. 6 RJ45 connectors with molded boots at Cat. 7 S/FT P FRNC -LS ZH flex cable.
- Color grey
- Available Lengths: 1 m, 2 m, 3 m, 5 m.

DISTRIBUTION PRODUCTS: For Copper

SMAP Panel for Copper Trunk



Applications

- For installation in 19" racks
- For distribution of PreCONNECT® COPPER Trunks at patchcords in data centers

Properties

- Assembled with two SMAP ½ part front plates
- Suitable to accept 24 PreCONNECT® COPPER RJ45 jack modules. CAT. 6A screened

Distribution Panel for Copper Trunk



Applications

- For installation in 19" racks
- For distribution of PreCONNECT® COPPER Trunks at patchcords in data centers

Properties

- Particularly suitable to accept 24 PreCONNECT® COPPER Trunks. Depth: 200 mm
- Material and colour: steel, RAL 9005 (black)

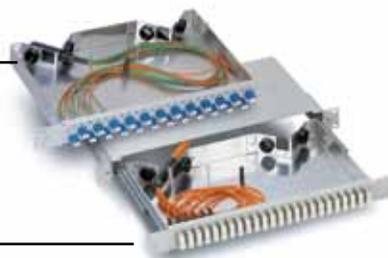
DISTRIBUTION PRODUCTS: For Fiber

Distribution Panels

Rosenberger distribution panels are used to interconnect Fiber Trunks with patchcords. These distribution panels are designed for installation in 19" racks. Available in 1 Height Unit (HU) - for up to 24 Channels-48 fibers and 2 HU - for up to 48 Channels - 96 fibers.

1 HU Distribution Panel for up to 24 Channels - 48 Fibers

Type:
Fixed Installation



Type:
Telescopic
Full-pullout

2 HU Distribution Panel for up to 48 Channels - 96 Fibers

Type:
Fixed Installation



Type:
Telescopic
Full-pullout

Properties

- Basic panel with optimized functionality
- Suitable to accept all cables assembled by Rosenberger
- Available in two types:
 - Fixed installation
 - Telescopic full-pullout: can be pulled out completely
- Torsion and strain resistant cable supports for
 - 2 PreCONNECT ® Trunk cable dividers for 1 HU
 - 4 PreCONNECT ® Trunk cable dividers for 2 HU
- 2 PG 21 (29 mm) cable inputs
- Cable guidance 45° slant backwards, lead-way to be selected
- 2 universal supports for simplex, duplex and breakout cables available, see accessories pages 144 / 145
- Screen print front plate labeling: numerical and alphanumerical
- Material and colour:
 - Body: aluminium, nature
 - Front: aluminium powder coated, RAL 7035 (lightgrey)

Weight (panel without couplers):

- Fixed installation:
 - 1 HU - 1120 g
 - 2 HU - 1580 g
- Telescopic full-pullout:
 - 1 HU - 1600 g
 - 2 HU - 2140 g

Universal Box



Applications

- Freely configurable and highly modular Universal Box for different installation environments, in which 19" panels are not necessary or possible.

Properties

- Dimensions: 360 mm x 254 mm x 111 mm
- For up to 24 channels (48 fibers)
- Universal Box available as distribution box and splice box:

1. Distribution box

- Assembled cables can be fed into the box and fixed on both front walls and attached at the inner coupler plate

2. Splice box

- Optionally, buffered-fiber pigtails, cable pigtails or pigtail-bundle-cables are available pre-assembled for splicing in the box
- To splice the pigtails on the cable, the cable has to be fed into the box and fixed on the designated front wall
- To attach the pigtails, assembled cables are fed into the box at the opposite side
- Cables can also be spliced directly to each other in the box
- Modular mounting parts for the front walls to feed and fix all kinds of cables into the box are available
- Universal Box by default assembled with SM AP ½ part front plates with FO couplers

Jumper Assemblies

Rosenberger Site Solutions offer a complete line-up of factory terminated RF/Coaxial and Fiber Jumper Assemblies

RF/Coaxial Jumper Assemblies

Our factory-assembled jumpers are the finest quality available on the market. The same quality and reliability known by our customers in Europe and Asia is now manufactured and available direct from our Lancaster, PA facility.

Features and Advantages

- Specially developed connectors using advanced soldering technology for the inner and outer conductor guarantee superior electrical characteristics
- Injection “over-molded” boot sealing on the cable jacket ensures a water tight seal under extreme climatic conditions
- 100% electrical testing for VSWR and PIM provides optimum performance
- Premium performance Cables are used exclusively on all assemblies offering high flexibility and small bending radius
- Available in any cable length with a large variety of connector combinations
Low intermodulation – $IM3 \leq -117$ dBm (3rd order product with 2 x 43 dBm carriers)
- Cable jackets of flame-retardant, halogen-free material (FRNC) are available
- Excellent return loss of ≥ 28 dB up to 2200 MHz



Fiber Jumpers

The Rosenberger fiber jumpers connect to remote radio heads or equipment



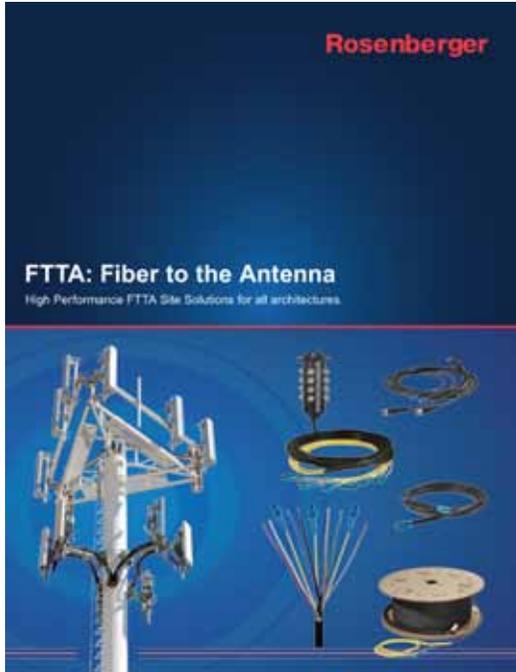
Features and Advantages

- Installed with LC-LC or LC-RDC Connectors
- Custom Fanout Lengths
- UV protected and riser rated
- Can be used indoors or outdoors
- Cable outer diameter: 5-7mm

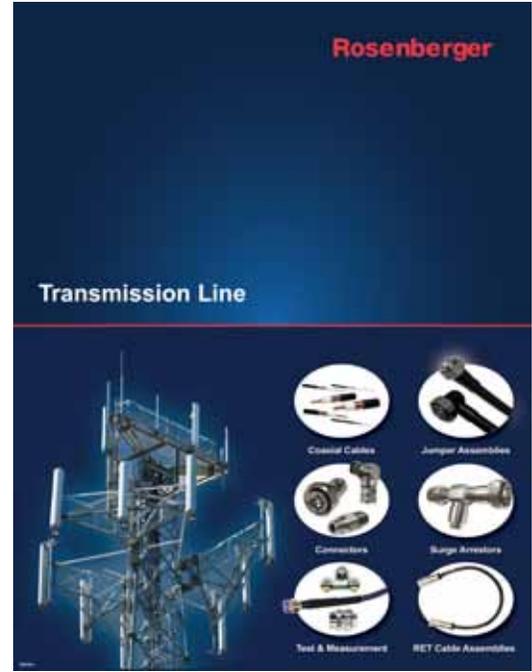
**To order Jumper Assemblies please Contact us at
1.866.598.5250 or rlss@rlss.us**

Also, available Rosenberger Fiber to the Antenna (FTTA), Transmission Line, Installation Materials and Tower Components Catalogs:

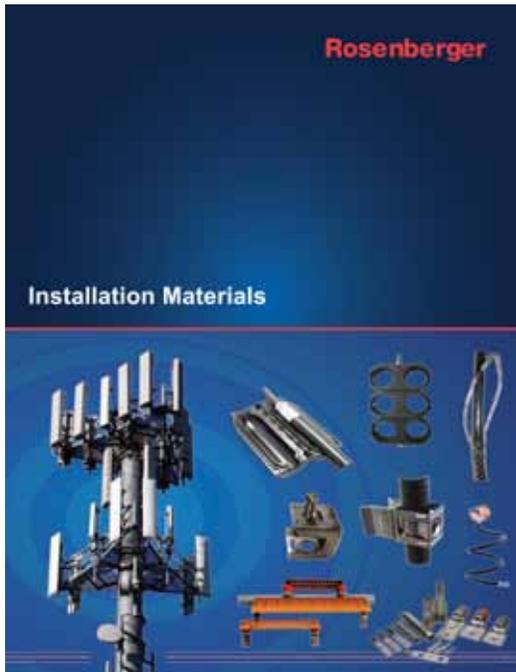
FTTA: Fiber to the Antenna



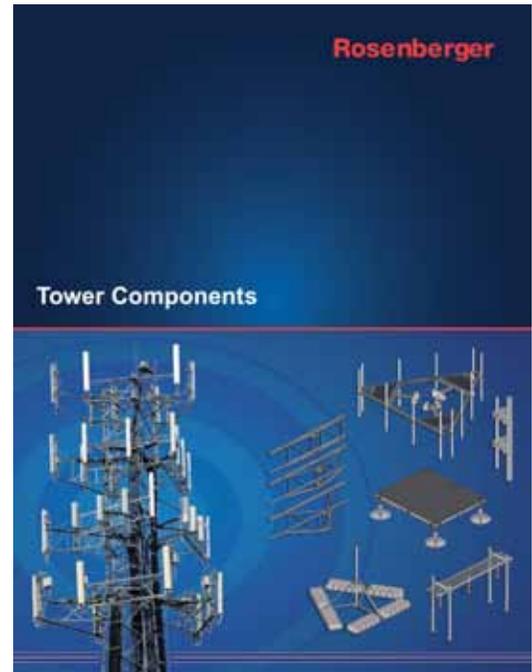
Transmission Line



Installation Materials



Tower Components



To request a Catalog please Contact us at
1.866.598.5250 or rlss@rlss.us

PART NUMBER INDEX

PART NUMBER INDEX		<u>Part Number</u>	<u>Page #</u>
<u>Part Number</u>	<u>Page #</u>	L-100-XX	8
A-XX-100-D	9	L-10-XX	8
A-XX-100-N	9	L-150-XX	8
A-XX-10-N	9	L-15-XX	8
A-XX-150-D	9	L-200-XX	8
A-XX-150-N	9	L-20-XX	8
A-XX-200-D	9	L-25-XX	8
A-XX-200-N	9	L-2-XX	8
A-XX-25-N	9	L-30-XX	8
A-XX-2-N	9	L-50-XX	8
A-XX-50-D	9	L-5-XX	8
A-XX-50-N	9	S-2-8F-DF	5
A-XX-5-N	9	S-2-8F-NF	5
		S-3-8F-DF	5
CB-2-C-NF-01	10	S-3-8F-NF	5
CB-2-FM-DF-03	10	S-4-8F-DF	5
CB-2-LH-NF-01	10	S-4-8F-NF	5
CB-2-PW-DF-01	10		
CB-4-LCAP-DF-01	10	S-Wave 8FW/EW-65-8	11
		S-Wave 8FW/EW-OD-3	11
DC-10-8F-DF	6	S-Wave 8FW-90-8	11
DC-10-8F-NF	6	S-Wave 8FW-OD-3	11
DC-13-8F-DF	6		
DC-13-8F-NF	6		
DC-15-8F-DF	6		
DC-15-8F-NF	6		
DC-20-8F-DF	6		
DC-20-8F-NF	6		
DC-30-8F-DF	6		
DC-30-8F-NF	6		
DC-5-8F-DF	6		
DC-5-8F-NF	6		
DC-6-8F-DF	6		
DC-6-8F-NF	6		
DC-8-8F-DF	6		
DC-8-8F-NF	6		
HM-3-8F-DF	7		
HM-3-8F-NF	7		
HM-3-AF-DF-02	7		
HM-42-8F-DF	7		

Rosenberger Site Solutions, LLC (“RSS”)
“Terms and Conditions of Purchase”
P.O. Box 4268, Lake Charles, Louisiana 70606-4268
Phone: (337)-598-5250 Fax: (337)-598-5290

RSS strives to provide first class customer service to purchasers of our products and services. Whether products are ordered on line or in person we work with our Customers to meet their commitments and to complete the transaction as quickly as possible. Our goal is to provide complete customer satisfaction.

Prices and Shipping: Orders are shipped at the lower of current or quoted prices. RSS reserves the right to correct any typographical errors in its catalog or on RSS’s web site, located at www.rlss.us. RSS further reserves the right to accept or reject an order at its discretion. RSS shall make all Products available to Customer’s authorized transportation carrier if specified in the Order. If a transportation carrier is not specified in the Order, RSS will ship the Products using a carrier of its choice. RSS will use commercially reasonable efforts to secure delivery of the Product on or before the date or dates set forth on the accepted Order. Unless otherwise expressly specified in the Order for all domestic shipments, within the United States of America, Customer shall pay the shipping charges, and accept the risk of loss from RSS’s location(s) (defined as “FOB Origin”). All claims for loss and damage shall be filed and processed by the Customer with the transportation carrier upon receipt of the Products at the designated site. Title to and risk of loss and damage to the Products shall pass to Customer immediately upon delivery of the Products either to a common carrier, or to an employee or other agent of Customer, at Supplier’s facility.

Payment Terms/Credit: Except as otherwise provided in a specific accepted order, all payments will be due within thirty (30) days after invoice date. Any amounts not paid when due shall thereafter bear interest until paid at the lesser of (i) one point five percent (1.5%) per month, or (ii) the maximum rate allowed by applicable law. Should Purchaser dispute the invoice or portion thereof, Purchaser shall be obligated to pay all undisputed amounts within the thirty (30) day payment period. Purchaser agrees to pay RSS all cost of collections including but not limited to reasonable attorney’s fees, collection fees and court costs incurred by RSS to collect properly due payments. Credit limits shall be determined and modified at the sole discretion of RSS. In the event that Customer is delinquent in payment, RSS may suspend any shipment or delivery or refuse to perform any work until all past due amounts, including finance charges, have been paid in full.

Taxes: Prices do not include any municipal, state or federal sales, use, excise, value added or similar taxes. Therefore, in addition to prices specified, the amount of any present or future tax that may be imposed shall be paid by Buyer, or in lieu thereof Buyer will provide Seller with a tax exemption certificate acceptable to the taxing authorities.

Warranties: RSS DOES NOT WARRANT THAT ANY INFORMATION, COMPUTER PROGRAM, RSS’S EFFORTS OR ANY PRODUCTS OR SERVICES PROVIDED BY RSS WILL FULFILL ANY OF CUSTOMER’S PARTICULAR PURPOSES OR NEEDS, NOR DOES RSS WARRANT THAT THE OPERATION OF THE PRODUCTS WILL BE UNINTERRUPTED OR ERROR-FREE. NO WARRANTIES OR REPRESENTATIONS, EXPRESSED OR IMPLIED, ARE MADE BY RSS TO CUSTOMER, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE SPECIFICALLY EXCLUDED.

Limitation of Liability: IN NO EVENT SHALL RSS BE LIABLE FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, PUNITIVE OR EXEMPLARY DAMAGES OR LOSSES, INCLUDING LOSS OF USE, LOSS OF OR DAMAGE TO RECORDS OR DATA, COST OF PROCUREMENT OF SUBSTITUTE GOODS, SERVICES OR TECHNOLOGY, REVENUE AND/OR PROFITS, SUSTAINED OR INCURRED REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT OR OTHERWISE, INCLUDING NEGLIGENCE, STRICT LIABILITY, INDEMNITY OR OTHERWISE, AND WHETHER OR NOT SUCH DAMAGES WERE FORESEEN OR UNFORESEEN AND REGARDLESS OF WHETHER SUCH PARTY HAD RECEIVED NOTICE OR HAD BEEN ADVISED, OR KNEW OR SHOULD HAVE KNOWN, OF THE POSSIBILITY OF SUCH DAMAGES OR LOSSES.

Returns: Customer may submit a request for return of Product(s) once Product(s) have been delivered to a common carrier, or to an employee or other agent of Customer, to the RSS facility within seven (7) days after receipt or if the Product becomes inoperative during the warranty period for such Product. All requests by Customer to return Products within that period must be submitted in writing to RSS utilizing the RSS Material Return Authorization Form (“RMA”). RSS shall, at its sole option, either accept or reject the Customer’s return of Products. All returned defective Products must be in the original packaging, unless the Product packaging was damaged and cannot be used to return such Products to RSS. Products authorized to be returned without a defect must be unopened and in original packages and may be (at RSS’s sole discretion) subject to a restocking fee as further identified in the RSS Terms and Conditions of Purchase (which is available on the RSS web site at www.rlss.us or a copy may be requested in writing at the address on this page).

ORDERS: PLACING AN ORDER WITH RSS THROUGH OUR CATALOG CONSTITUTES ACCEPTANCE OF THE MOST CURRENT TERMS AND CONDITIONS OF SALE STATED HEREIN OR AS PUBLISHED ON RSS’S WEBSITE WWW.RLSS.US AT THE TIME OF SALE. SUCH TERMS AND CONDITIONS MAYBE AMENDED OR CHANGED FROM TIME TO TIME WITHOUT NOTICE. NO MODIFICATION OF THESE TERMS AND CONDITIONS ARE BINDING ON RSS WITHOUT ITS EXPRESSLY WRITTEN APPROVAL. THE LAWS OF THE STATE OF LOUISIANA APPLY TO ALL ORDERS PLACED WITH RSS.

Contact Information and Locations

Rosenberger

Rosenberger Site Solutions, LLC

P.O. Box 4268

Lake Charles, LA 70606

Tel: 337-598-5250

Fax: 337-598-5290

| E-Mail: rlss@rlss.us

| Web: www.rlss.us



Central Location

Headquarters
102 Dupont Drive
Lake Charles, LA 70607
Tel: (337) - 598 5250
Fax: (337) - 598 5290

East Coast Location

Charlotte Metro Area
205 Quantz Dr.
Rock Hill, SC 29730
Tel: (803) - 233 3208
Fax: (803) - 233 2698

West Coast Location

Salt Lake City Area
1250 S. 3600 W.
Salt Lake City, UT 84104
Tel: (801) - 972 3525
Fax: (801) - 886 3215

Canadian Location

5690 Ambler Dr.
Mississauga, Ontario
L4W 2K9
Tel: (289) -628 2885
Fax: (905) - 212 9115

Call: 1(866) 598 5250 or visit www.RLSS.us