

RF Line Passives



All LS Series RFLPs are two-way, 15 ampere, AC power-passing devices that provide an operational RF passband of 5MHz to 1GHz. All units are enclosed in a corrosion-resistant, die-cast aluminum housing. The housing is equipped for strand, pole, or pedestal mounting and will accept up to 1-inch diameter coaxial cables. The faceplate is keyed to ensure proper installation. To make splicing easier, C-COR RFLPs use a center conductor seizure mechanism that can be rotated 90 degrees. This feature allows for a variety of installation configurations.

LS Series RFLPs use plug-in electronics, which allow for easy troubleshooting and simple field replacement. Units with fuse locations are shipped with AC power-passing shorting bars. FEQRs are shipped with jumpers in the return plug-in location.

RF Line Passives: LS Series

The LS series RF line passives, with corrosion-resistant housings, have a 5-1000MHz passband and a 15 Amp power passing capacity. 90° rotation of entry ports allows for easy installation or replacement in the field.

Specifications

Model	P/N	Parameter	Port	Spec	Loss in dB at Frequency (MHz)										
					5	10	50	300	450	550	750	860	1000		
LS-15G-2 (2-Way Splitter)	PS0120	Insert. Loss	1-3,1-4	Typ.	3.75	3.61	3.60	3.80	3.90	4.00	4.20	4.40	4.70		
				Max.	3.95	3.91	3.80	4.16	4.20	4.30	4.50	4.70	4.90		
		Isolation	3-4	Typ.	25	30	30	27	27	27	27	27	27		
				Min.	22	22	22	22	22	22	22	22	22		
LS-15G-3 (3-Way Splitter)	PS0121	Insert. Loss	1-3	Typ.	3.75	3.61	3.60	3.86	3.90	4.00	4.20	4.40	4.70		
				Max.	3.95	3.81	3.80	4.16	4.20	4.30	4.50	4.70	4.90		
		Insert. Loss	1-2, 1-4	Typ.	7.15	7.00	6.85	7.25	7.25	7.30	7.60	7.90	8.30		
				Min.	7.35	7.20	7.15	7.55	7.55	7.60	7.90	8.20	8.65		
		Isolation	2-3, 2-4	Typ.	25	30	30	27	27	27	27	27	27		
				Min.	22	22	22	22	22	22	22	22	22		
LS-15G-DC-8 (Directional Coupler)	PS0122	Insert. Loss	1-3	Typ.	1.90	1.80	1.65	1.82	1.92	2.00	2.20	2.35	2.45		
				Max.	2.20	2.10	2.00	2.20	2.20	2.30	2.53	2.60	2.85		
		Tap	1-4	Typ.	8.45	8.45	8.30	8.40	8.45	8.50	5.55	8.65	8.68		
				Min.	8.48	8.48	8.50	8.60	8.65	8.70	8.75	8.87	9.10		
		Isolation	3-4	Typ.	20	24	24	26	27	27	27	27	27		
				Min.	18	22	22	22	22	22	22	22	22		
		LS-15G-DC-12 (Directional Coupler)	PS0123	Insert. Loss	1-3	Typ.	1.10	0.98	0.85	1.10	1.15	1.20	1.40	1.50	1.65
						Max.	1.25	1.15	1.15	1.35	1.39	1.50	1.74	1.86	2.00
Tap	1-4			Typ.	12.00	11.90	12.00	12.10	12.10	12.10	12.20	12.20	12.20		
				Min.	12.20	12.20	12.30	12.40	12.40	12.40	12.50	12.50	12.55		
Isolation	3-4			Typ.	29	29	29	25	25	25	25	25	25		
				Min.	26	26	26	22	22	22	22	22	22		
LS-15G-DC-16 (Directional Coupler)	PS0124	Insert. Loss	1-3	Typ.	0.97	0.82	0.72	0.82	0.91	0.95	1.05	1.18	1.38		
				Max.	1.17	1.02	1.02	1.12	1.21	1.25	1.35	1.38	1.68		
		Tap	1-4	Typ.	15.40	15.60	15.80	15.90	15.70	15.70	15.80	15.80	16.20		
				Min.	15.90	16.00	16.10	16.30	16.10	16.10	16.20	16.20	16.60		
		Isolation	3-4	Typ.	27	32	33	34	32	31	30	28	25		
				Min.	23	25	25	25	25	25	22	22	22		
LSB-15G-MC (Splice Box)	PS0118	Insert. Loss	1-3	Typ.	0.01	0.01	0.01	0.06	0.10	0.13	0.18	0.18	0.19		
				Max.	0.10	0.10	0.10	0.10	0.15	0.17	0.22	0.22	0.25		
LS-15G-C (Power Inserter)	PS0119	Insert. Loss	1-3	Typ.	0.38	0.30	0.35	0.40	0.50	0.60	0.70	0.75	0.80		
				Max.	0.60	0.40	0.45	0.60	0.80	0.90	1.00	1.05	1.15		
		Isolation	3-4	Typ.	80	80	75	70	70	65	65	65	65		
				Min.	70	70	70	65	60	60	60	60	60		
Return Loss All Ports:				Typ.	20	20	22	22	22	22	22	22			
				Min.	18	18	20	20	20	20	20	20			

Bandwidth: 5-1000MHz

Hum Modulation (Time Domain) @ 15 Amps

5-750MHz: -65 dBc

751-1000MHz: -60 dBc

Frequency Response: ±0.3dB max/6MHz

Tap Loss Tolerance: ±0.5dB max

Power Passing: 15A @ 90V

Operational Temperature Range: -40 to +60°C

Operational Environment Protection, IP Rating: IP-67 per IEC529

Corrosion Protected Housing: Polyester Powder Coat

Size, inches (cm): 5.93 x 5.93 x 2.60 (15.06 x 15.06 x 6.60)

Typical Weight, lbs (kg): 1.60 (0.72)

Specification Document Number 601235 Rev B

Specifications subject to change without notice

Feeder Line Equalizers: LS-FEQR-1 GHz, LS-FEQR-862, LS-FEQR-750, and FEQ5-862 Series

These new Feeder Line Equalizers with Return PADs have a die-cast aluminum housing with 90° selectable access ports. They incorporate a standard plug-in PAD in the return path that allows the independent adjustment of return signal levels to minimize the variation between different feeder legs.

LS-FEQR-1GHz-EQ8 (P/N: PS0128) with plug-in reverse PAD

Frequency, MHz	5-42	54	550	750	860	1002
Insertion Loss, dB	1.2	8.5	4.0	2.8	2.1	1.8
Passband, MHz						
Forward						54-1002
Reverse						5-42
Passband Flatness, dB						
Equalized Cable						± 0.65
Reverse						± 0.3
Return Loss, dB Min.						
Input						20
Output						20
Power Passing, Amps Max.						15
Impedance, Ohms, All Ports						75
Hum Modulation @ 15A, dB						
5-10 MHz						Better than -65 dB
11-42 MHz						Better than -70 dB
54-860 MHz						Better than -65 dB
861-1002 MHz						Better than -62 dB
Group Delay, Max.						
@ 55.25 MHz-58.83 MHz:						19 ns
@ 5.5 MHz- 7.0 MHz:						18 ns
@ 38.5 MHz-40.0 MHz:						8 ns
Reverse Pad Type						C-COR Model IPB-x Series
Reverse Pad Range						0 dB to 22 dB

Specification Document Number 1500923 Rev B

Specifications subject to change without notice

LS-FEQR-1 GHz-EQ11 (P/N: PS0129) with plug-in reverse PADS

FREQUENCY, MHz	5-42	54	550	750	860	1002
Insertion Loss, dB	1.2	11.2	4.8	3.1	2.2	1.9
Passband, MHz						
Forward				54-1002		
Reverse				5-42		
Passband Flatness, dB						
Equalized Cable				± 0.65		
Reverse				± 0.4		
Return Loss, dB Min.						
Input				18		
Output				18		
Power Passing, Amps Max.				15		
Impedance, Ohms, All Ports				75		
Hum Modulation @ 15A, dB						
5-10 MHz				Better than -65 dB		
11-42 MHz				Better than -70 dB		
54-860 MHz				Better than -65 dB		
861-1002 MHz				Better than -62 dB		
Group Delay, Max.						
@ 55.25 MHz-58.83 MHz:				19 ns		
@ 5.5 MHz- 7.0 MHz:				18 ns		
@ 38.5 MHz-40.0 MHz:				8 ns		
Reverse Pad Type				C-COR Model IPB-x Series		
Reverse Pad Range				0 dB to 22 dB		

Specification Document Number 1500924 Rev B

Specifications subject to change without notice

LS-FEQR-862 (P/N PS0125) Feeder Line Equalizers

Frequency, MHz	5-42	54	100	200	300	400	500	550	600	700	750	862
Insertion Loss, dB	1.2	10.0	8.5	7.2	6.1	5.2	4.3	3.9	3.4	2.7	2.3	1.8
Cable Equalized, dB								8.0				10.3
Passband, MHz												
Forward								54-862				
Return								5-42				
Passband Flatness, dB												
Equalized Cable								±0.3				
Return								±0.3				
Return Loss, dB Min.												
Input								18				
Output								18				
Power Passing, Amps Max.								15				
Impedance, Ohms, All Ports								75				
Hum Modulation @ 15A, dB												
5-10MHz								Better than -65 dB				
11-42MHz								Better than -70 dB				
54-750MHz								Better than -65 dB				
750-862MHz								Better than -65 dB				
Group Delay, Max.												
55.25-58.83MHz								19 ns				
5.5-7.0MHz								18 ns				
38.5-40.0MHz								8 ns				
Return Pad Type								C-COR Model IPB-x Series				
Return Pad Range								0 dB to 22 dB				

Specification Document Number 601234 Rev A

Specifications subject to change without notice

LS-FEQR-750 (P/N: PS0126) Feeder Line Equalizers

Frequency, MHz	5-42	54	100	200	300	400	500	550	600	700	750
Insertion Loss, dB	1.2	9.0	7.8	6.4	5.2	4.1	3.2	3.0	2.6	1.6	1.5
Cable Equalized, dB					5.6			7.9			9.0
Passband, MHz											
Forward											54-750
Return											5-42
Passband Flatness, dB											
Equalized Cable											±0.25
Return											±0.25
Return Loss, dB Min.											
Input											18
Output											18
Power Passing, Amps Max.											15
Impedance, Ohms, All Ports											75
Hum Modulation @ 15A, dB											
5-10MHz											Better than -65 dB
11-42MHz											Better than -70 dB
54-750MHz											Better than -65 dB
Group Delay, Max.											
55.25-58.83 MHz											19 ns
5.5-7.0MHz											18 ns
38.5-40.0MHz											8 ns
Return Pad Type											C-COR Model IPB-x Series
Return Pad Range											0 dB to 22 dB

Specification Document Number 601233 Rev A

Specifications subject to change without notice

Feeder Line Terminator: LS-FTERMR-42

LS-FTERMR-42 (P/N: PS0127) Feeder Line Terminator

Frequency (MHz)	5-42	54	100	200	300	400	500	550	600	700	750	862
Insertion Loss, dB	1.2											
Isolation, dB min.		40	40	35	30	30	25	20	20	20	20	20
Passband, MHz												
Forward												
Reverse												
Passband Flatness, dB												
Equalized Cable												
Reverse												
Return Loss, dB Min.												
Input												
Output												
Power Passing, Amps Max												
Impedance, Ohms, All Ports												
Hum Modulation @ 15A, dB												
5-10MHz												
11-42MHz												
54-750MHz												
750-862MHz												
Group Delay, Max												
@ 55.25MHz-58.83MHz												
@ 5.25MHz-7.0MHz												
@ 38.5MHz-40.0MHz												
Reverse Pad Type												
Reverse Pad Range												

Specification Document Number 1500328 Rev A

Specifications are subject to change without notice.

Americas Headquarters

60 Decibel Road • State College • Pennsylvania • 16801 • USA
T: 1-814-238-2461 T: 1-800-233-2267 F: 1-814-238-4065

EuroPacific Headquarters

Transistorstraat 44-V • 1322 CG Almere • The Netherlands
T: 31-36-546 1111 F: 31-36-536 4255

The C-COR logo is a registered trademark of C-COR Incorporated.
Copyright © 2007 C-COR Incorporated. All rights reserved.



www.c-cor.com

