

High Power 1 GHz Communication Passives



**Revolutionary Technologies from Lindsay Broadband Inc.
Create the New Standard for System Symmetry**

**COMPARE BANDWIDTH POWER HANDLING CAPABILITY AND NON-DISRUPTION OF SERVICE . . .
ALL THIS AND MORE FROM THE PEOPLE WHO CREATED THE STANDARD**

**THE STANDARDS
WE MEET:**

**ELECTROMAGNETICS
AND SAFETY**

Electromagnetic
Compatibility
and Electrical Safety-
Generic Criteria
Bellcore-GR-1089-CORE
Type 1

EMI isolation better than
100 dB

RELIABILITY

Reliability Prediction
Procedure for Electronic
Equipment
Bellcore-TR-NWT-000332,
Black Box Method 1
Case 1
(Results on file)

SURVIVABILITY

I.E.E.E. Guide for Surge
Voltages in Low Voltage AC
Power Circuits
ANSI/IEEE-C62.41.1991
Category B3
(Combination Wave)

WEATHERING

A.S.T.M. Standard Test
Method of Salt Spray (Fog)
Testing
ASTM-B117-80
(Results on file)

**HIGH CURRENT
SURVIVABILITY**

25 Amperes for 2 hours

**OPTIONAL
LHI1XXH
30 Amperes Input Power
Inserter**

Performance Specifications 5 to 1000 MHz 20 Ampere Rating

Frequency Response

Model		5	10	30	40	50	300	450	550	750	850	1000	
LHI100	No. 2	0.40	0.30	0.25	0.25	0.25	0.25	0.30	0.35	0.45	0.55	0.70	AVE
		0.55	0.45	0.35	0.35	0.35	0.35	0.40	0.45	0.55	0.70	0.90	MAX
	ISO	60.00	64.00	66.00	66.00	65.00	50.00	48.00	48.00	48.00	49.00	50.00	MIN
LHS102	No. 2&3	3.60	3.65	3.50	3.50	3.50	3.60	3.80	3.90	4.10	4.25	4.50	AVE
		3.75	3.80	3.60	3.60	3.60	3.80	3.95	4.05	4.30	4.40	4.75	MAX
	ISO	20.00	28.00	37.00	37.00	36.00	23.00	22.00	21.50	21.00	21.00	21.00	MIN
LHS103	No. 4	3.60	3.60	3.45	3.45	3.45	3.70	3.85	4.00	4.20	4.40	4.70	AVE
		3.75	3.75	3.60	3.60	3.60	3.90	4.05	4.15	4.40	4.55	4.90	MAX
	No. 2&3	6.80	7.00	6.80	6.80	6.80	6.90	7.15	7.30	7.55	7.95	8.35	AVE
	7.10	7.20	7.00	6.95	6.95	7.15	7.35	7.45	7.75	8.20	8.70	MAX	
	ISO	26	32	37	38	38	31	31	29	25	23	23	MIN
LHS103B	No. 4	5.50	5.55	5.40	5.35	5.35	5.75	5.95	6.05	6.25	6.50	6.80	AVE
		5.65	5.70	5.55	5.50	5.50	5.95	6.20	6.30	6.50	6.70	7.20	MAX
	No. 2&3	5.80	5.80	5.55	5.50	5.45	5.60	5.75	5.85	6.15	6.50	6.80	AVE
	5.95	5.95	5.70	5.65	5.60	5.80	6.00	6.10	6.40	6.70	7.20	MAX	
	ISO	23	26	28	29	29	22	23	23	23	22	21	MIN
LHC107	No. 2	1.50	1.55	1.50	1.50	1.50	1.70	1.80	1.90	2.00	2.10	2.35	AVE
		1.80	1.85	1.75	1.75	1.75	2.05	2.30	2.40	2.60	2.70	2.90	MAX
	No. 3	7.75	7.60	7.45	7.45	7.45	7.45	7.30	7.50	7.60	7.80	8.30	AVE
	8.25	8.10	7.85	7.85	7.85	7.90	7.95	8.00	8.25	8.40	8.80	MAX	
	ISO	19	31	31	31	30	20	19	18	16	16	16	MIN
LHC110	No. 2	1.05	1.25	1.13	1.13	1.13	1.41	1.70	1.70	1.97	2.09	2.47	AVE
		1.45	1.45	1.40	1.40	1.40	1.75	2.00	2.10	2.35	2.50	2.75	MAX
	No. 3	10.20	10.20	10.20	10.20	10.00	9.70	9.60	9.50	9.70	9.80	10.20	AVE
	10.70	10.50	10.50	10.50	10.30	10.20	10.20	10.20	10.40	10.50	10.80	MAX	
	ISO	22	28	28	28	28	22	19.5	19	18	18	18	MIN
LHC108	No. 2	2.05	2.15	1.95	1.95	1.90	1.95	2.10	2.20	2.40	2.50	2.85	AVE
		2.20	2.30	2.10	2.10	2.10	2.20	2.30	2.40	2.60	2.75	3.20	MAX
	No. 3	9.30	9.40	9.15	9.10	9.05	9.10	9.10	9.10	9.20	9.40	9.80	AVE
	9.50	9.60	9.40	9.30	9.25	9.30	9.30	9.30	9.40	9.60	10.00	MAX	
	ISO	21	26	29	29	29	25	24	23	22	20	19	MIN
LHC112	No. 2	1.05	1.20	1.00	1.00	0.95	1.05	1.30	1.40	1.60	1.95	2.35	AVE
		1.25	1.35	1.10	1.10	1.10	1.20	1.45	1.60	1.85	2.20	2.60	MAX
	No. 3	12.00	12.15	12.15	12.10	12.10	12.10	11.95	12.05	12.20	12.25	12.25	AVE
	12.40	12.30	12.30	12.25	12.25	12.30	12.25	12.35	12.55	12.65	12.75	MAX	
	ISO	29	41	37	36	35	26	26	26	25	22	19	MIN
LHC116	No. 2	0.95	1.15	0.95	0.90	0.90	0.85	1.05	1.10	1.10	1.20	1.50	AVE
		1.20	1.30	1.10	1.05	1.05	1.10	1.20	1.30	1.30	1.35	1.70	MAX
	No. 3	15.70	16.00	16.10	16.10	16.10	16.10	16.10	16.25	16.70	16.90	16.40	AVE
	15.80	16.10	16.20	16.20	16.20	16.30	16.30	16.50	16.95	17.15	17.20	MAX	
	ISO	33	45	41	39	38	29	29	29	29	26	21	MIN
LHI108	No. 2	2.00	2.15	1.90	1.85	1.85	1.90	2.10	2.20	2.30	2.50	2.85	AVE
		2.10	2.30	2.10	2.10	2.10	2.10	2.30	2.40	2.50	2.75	3.20	MAX
	No. 3	9.40	9.30	9.20	9.10	9.05	9.00	8.70	8.60	8.70	9.00	9.50	AVE
	9.60	9.50	9.40	9.30	9.25	9.30	9.30	9.30	9.40	9.60	10.00	MAX	
	ISO RF	21	26	29	29	29	25	23	22	20	19	18	MIN
	ISO AC	60	64	66	66	65	50	48	48	48	49	50	MIN
LHI112	No. 2	1.05	1.20	1.00	1.00	0.95	1.05	1.30	1.40	1.60	1.95	2.35	AVE
		1.25	1.35	1.10	1.10	1.10	1.20	1.45	1.60	1.85	2.20	2.60	MAX
	No. 3	12.20	12.10	12.10	12.05	12.05	11.60	11.40	11.30	11.30	11.60	11.80	AVE
	12.40	12.30	12.30	12.25	12.25	12.30	12.25	12.35	12.35	12.35	12.35	MAX	
	ISO RF	29	41	38	37	36	26	25	24	22	21	19	MIN
	ISO AC	60	64	66	66	65	50	48	48	48	49	50	MIN
LHI116	No. 2	0.95	1.15	0.95	0.90	0.90	0.85	1.05	1.10	1.10	1.20	1.50	AVE
		1.20	1.30	1.10	1.05	1.05	1.10	1.20	1.30	1.30	1.35	1.70	MAX
	No. 3	16.30	16.10	16.00	16.00	16.00	15.50	15.00	14.90	15.00	15.00	15.00	AVE
	16.50	16.30	16.20	16.20	16.20	16.20	16.20	16.30	16.30	16.30	16.30	MAX	
	ISO RF	32	45	40	39	38	34	32	31	29	28	24	MIN
	ISO AC	60	64	66	66	65	50	48	48	48	49	50	MIN
LHI100D	No. 2	0.45	0.35	0.25	0.25	0.25	0.20	0.25	0.30	0.35	0.50	0.70	AVE
		0.55	0.45	0.35	0.35	0.35	0.35	0.40	0.45	0.55	0.70	0.90	MAX
	ISO AC	60	64	66	66	65	50	48	48	48	49	50	MIN
LHI100H	No. 2	0.45	0.35	0.25	0.25	0.25	0.20	0.25	0.30	0.35	0.50	0.70	AVE
		0.55	0.45	0.35	0.35	0.35	0.35	0.40	0.45	0.55	0.70	0.90	MAX
	ISO AC	60	64	66	66	65	50	48	48	48	49	50	MIN

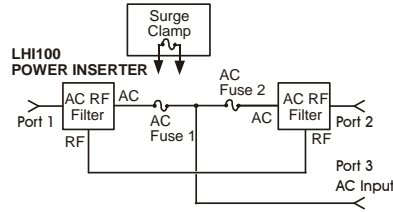
RETURN LOSS	18	18	18	18	20	20	20	20	20	20	20	20	MIN
HUM MODULATION	Average of 5, 10 and 50 MHz						Average of 300, 450, 550, 750 and 1000 MHz						
@ 10 Amperes													MIN
@ 12 Amperes													MIN
@ 15 Amperes													MIN
@ 20 Amperes													MIN
TEMP RANGE	-40 to +60 °C												

LACS100	AC Current Rating	25 Amperes
	Resistance between Ports	25 ohms max

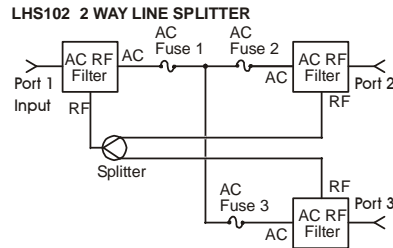
All specifications subject to change without notice

Model **Description**
LHI100 **Power Inserter**

Block Diagram

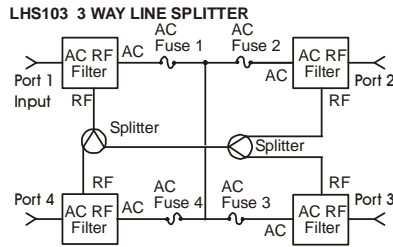


LHS102 **2 Way Line Splitter**



LHS103 **3 Way Line Splitter**

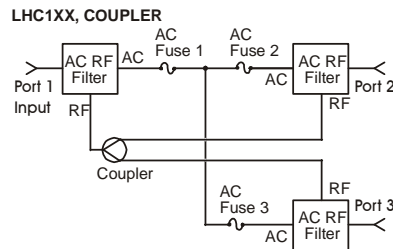
LHS103B **Balanced 3 Way Line Splitter**



LHC108 **8dB Status Picker/Power Inserter**

LHC112 **12dB Status Picker/Power Inserter**

LHC116 **16dB Status Picker/Power Inserter**

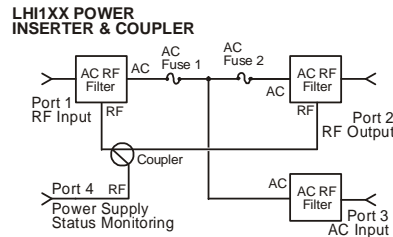


LHI108 **8dB Status Picker/Power Inserter**

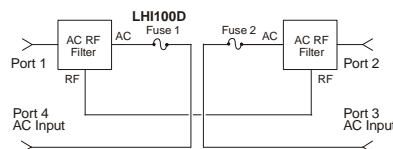
LHI112 **12dB Status Picker/Power Inserter**

LHI116 **16dB Status Picker/Power Inserter**

LHI120 **20dB Status Picker/Power Inserter**

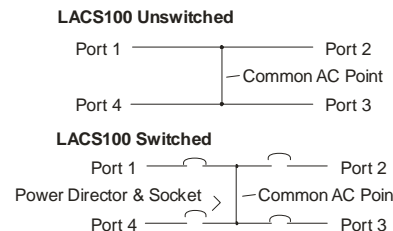


LHI100D **Dual Power Inserter**



Special Variation **No RF**

LACS **Central Node Power Inserter**



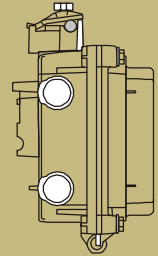
Dimensions

6 3/8" X 5 3/4" X 2 15/16"

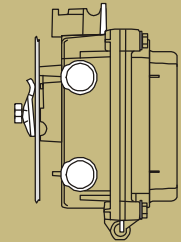
Weight

1Kg (2.2 lb.)

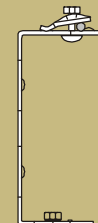
Mounting Arrangements



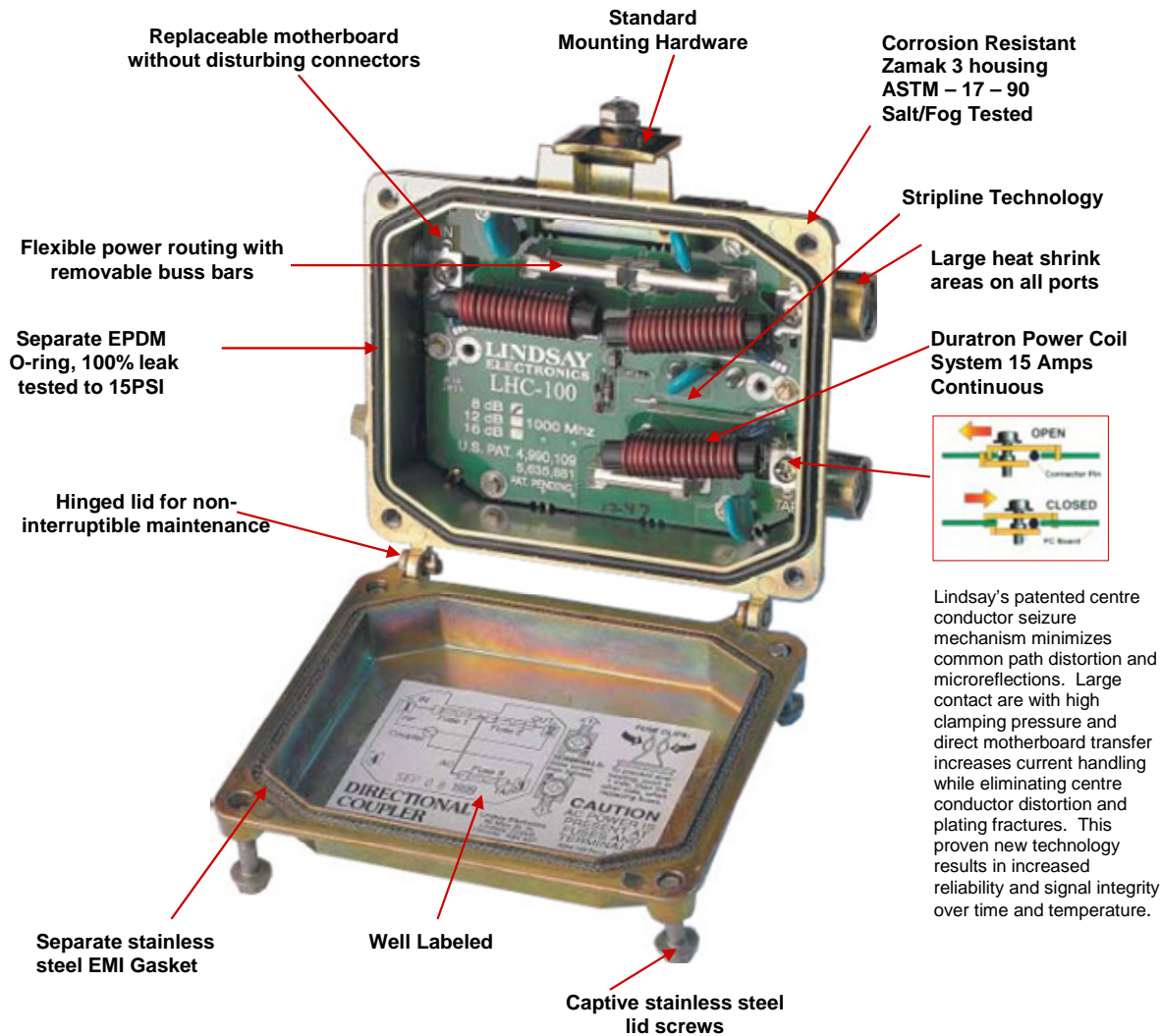
Aerial Mount



Pedestal Mount



Hanger Bracket



Lindsay Surge Clamp



Constant – Repetitive AC RMS S4070 device.....70 A Max.
 Voltage (Forward & Reverse) AC RMS.....400 V Max.
 Rate of "turn off" voltage.....1500 V/uSec.
 Rate of "commutation" voltage (dv/dt).....40V/uSec.
 Voltage Triggering range (before activated).....140-170 V AC.
 Current (1 cycle) Non-Repetitive (60 Hz).....950 A Max.
 Current (1 cycle) Non-Repetitive (50 Hz).....800 A Max.
 Fuse action current (8.3 mSec).....3745 A²Sec Max.

LHI-100 Application

