

ALS-R40

The **ALS-R40** is a rack mount solution for central office or service providers, which nests up to 16 cards containing 12 each ADSL line splitters which provide low-pass filters designed to provide POTS (Plain Old Telephone System) service to a line that is utilizing ADSL technology. This device is designed to eliminate interference to POTS equipment by blocking high frequency energy (20KHz~1.1MHz).

ADSL Line Splitter RACK

PRELIMINARY



FEATURES

- 6U high 19" Rack
- Up to 16 cards (192 loop max).
- Handles all POTS loop current from 0mA to 100mA.
- Consists exclusively of all passive elements.
- Designed for implementation of ADSL CO application.
- Provides excellent isolation between DSL and POTS.
- -10 to +70°C operating temperature range.
- Complies with Annex E.2 of ITU-T G.992.1
- If the power supply or ATU-C/ATU-R fails, telephone service on the ADSL line will operate normally.

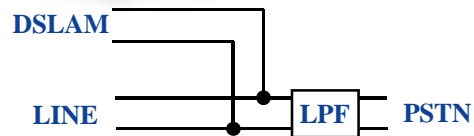


Figure 1

SPECIFICATIONS

PARAMETER	CONDITION	MIN.	TYP.	MAX.	UNITS.
Impedance	300 to 3.4KHz		900		Ohms
Insertion loss	1004Hz short loop			1.0	dB
	1004Hz long loop			0.75	dB
Attenuation distortion	200 to 3.4KHz short loop	-1.5		1.5	dB
	3.4K to 4.0KHz short loop	-2.0		2.0	dB
	200 to 3.4KHz long loop	-1.5		0.5	dB
	3.4K to 4.0KHz long loop	-1.5		1.0	dB
Cut off frequency	-3dB		8		KHz
ADSL band Attenuation	30K to 300KHz	-65			dB
	300K to 1104KHz	-55			dB
Delay Distortion	600 to 3.2KHz			200	us
	200 to 4.0KHz			250	us
Return loss	ERL	8			dB
	SRL-L	5			dB
	RL-H	5			dB
Common Mode Rejection Ration	600 to 3.2KHz	-100			dB
Longitudinal Balance	200 to 1.0KHz	-60			dB
	1.0K to 3.0KHz	-60			dB
DC Resistance				20	Ohms
Isolation resistance to Earth		5.0M			Ohms
DC current carrying capacity				100	mA
Operating temperature		-10		70	°C
Storage temperature		-15		70	°C
Humidity		10		90	%
ESD discharge limits		15K			VDC

- **ALS-R40-6U-RACK**
- **ALS-R40-12P-9-N Card**

ADSL Line Splitter RACK MOUNT
ADSL Splitter Card, 12P, 900ohm

CTC
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ISO 9001

INSTALLATION DETAIL

The **ALS-R40** rack connections are organized into card sets of four. Each physical card provides 12 loops. A four card set provides 48 loops. Each card set provides high density connections to the central office DSLAM using 2-50 pin (2.54mm pitch) locking header connector and ribbon cables. Each ribbon connector supports 24 loops using the wire pairing shown in the Table 1 below. POTS and line connections are provided via two sets each of 12x4 wire wrap terminals. The table below provides an exact reference for cable wiring.

ORDERING INFORMATION

- **ALS-R40-PIN**
ADSL Line Splitter Rack, for CO application, w/wire wrap and 50pin locking ribbon cable connections .
- **ALS-R40 12P-9-N Card**
ADSL Line Splitter Card, 12 Loops, 900 ohm, 8k Hz.

Loop Connections

Loop No.				Pin-assign	Loop No.				Pin-assign
1 25	49 73	97 121	97 121	1 2	13 37	61 85	109 133	157 181	25 26
2 26	50 74	98 122	98 122	3 4	14 38	62 86	110 134	158 182	27 28
3 27	51 75	99 123	99 123	5 6	15 39	63 87	111 135	159 183	29 30
4 28	52 76	100 124	100 124	7 8	16 40	64 88	112 136	160 184	31 32
5 29	53 77	101 125	101 125	9 10	17 41	65 89	113 137	161 185	33 34
6 30	54 78	102 126	102 126	11 12	18 42	66 90	114 138	162 186	35 36
7 31	55 79	103 127	103 127	13 14	19 43	67 91	115 139	163 187	37 38
8 32	56 80	104 128	104 128	15 16	20 44	68 92	116 140	164 188	39 40
9 33	57 81	105 129	105 129	17 18	21 45	69 93	117 141	165 189	41 42
10 34	58 82	106 130	106 130	19 20	22 46	70 94	118 142	166 190	43 44
11 35	59 83	107 131	107 131	21 22	23 47	71 95	119 143	167 191	45 46
12 36	60 84	108 132	108 132	23 24	24 48	72 96	120 144	168 192	47 48

Table 1:Reference