

Distance Transmission Chart

Date Rate		143 Mb/s	177 Mb/s	270 Mb/s	360 Mb/s	1.5 Gb/s	3.0 Gb/s	3 Gb/s Single Link, 6 Gb/s Dual Link, 12 Gb/s Quad Link, 24 Gb/s Octa Link (3 Gb/s per Link)	6 Gb/s Single Link, 12 Gb/s Dual Link, 24 Gb/s Quad Link (6 Gb/s per Link)	12 Gb/s Single Link, 24 Gb/s Dual Link (12 Gb/s per Link)
Application		Composite NTSC	Composite PAL	Component SDI	-	720p-1080i	1080p	UHDTV1, UHDTV2	UHDTV1, UHDTV2	UHDTV1, UHDTV2
½ clock in MHz		71.5	88.5	135	180	750	1500	1500	3000	6000
Max attenuation in dB		30	30	30	30	20	20	40	40	40
Prod. Type	Product Number									
0.3/1.4	179DT/179DTNH	165	152	125	109	35	25	49	34	
0.4/1.9	70078/70078CH	233	208	169	146	47	33	66	46	
0.5/2.4	1865A	209	191	155	134	41	27	55		
0.6/2.6	1855P	301	276	223	193	58	38	76	51	
0.6/2.6	1855A ¹⁾	312	284	233	204	65	45	91	62	
0.6/2.6	4855R/4855ANH	325	295	244	212	67	47	94	66	45
0.6/2.8	1855ENH ²⁾ / 1855ECH / 1855EPU / 1855DNH	349	316	261	227	74	52	103	71	
0.6/2.8	70080 / 70080NH / 70080CH	349	316	261	227	74	52	103	71	
0.6/2.8	4855ENH	363	328	272	234	76	54	107	75	51
0.8/3.4	1506A ³⁾	413	379	309	266	81	54	108	71	
0.8/3.7	1505F	358	323	256	220	67	45	90	60	
0.8/3.7	1505A ³⁾ / 1505ANH / 1505DNH	439	401	330	289	92	64	127	87	
0.8/3.7	70081 / 70081NH / 70081CH	439	401	330	289	92	64	127	87	
0.8/3.7	4505R / 1505ANH	449	403	329	287	94	66	132	92	63
1.0/4.3	1695A	520	477	383	331	98	64	128	84	
1.0/4.6	1694F	445	400	319	275	85	57	115	69	
1.0/4.6	1694A ⁴⁾ / 1694ANH / 1694DNH	546	503	408	259	113	78	155	105	
1.0/4.6	70082 / 70082NH / 70082CH	546	503	408	259	113	78	155	105	
1.0/4.6	4694R / 4694ANH	580	522	426	369	118	82	165	114	79
1.3/5.7	1794A / 1794DNH	694	633	519	451	143	97	194	132	
1.3/5.7	4794R / 4794ANH	680	623	523	461	151	105	209	144	98
1.6/7.0	7732A	785	712	572	492	137	86	172	108	
1.6/7.2	7731A / 7731ANH / 7731DNH	851	796	637	560	177	119	238	161	
1.6/7.2	70084 / 70084NH / 70084CH	851	796	637	560	177	119	238	161	
1.6/7.2	4731R / 4731ANH	861	808	649	567	182	126	252	173	117

The serial digital interconnect standards are designed to operate where the signal loss at ½ the clock frequency does not exceed the approximate loss values listed below. The recommended length values shown are based on typical attenuation values for the cables listed and the following criteria:

Max. length = 30 dB loss at ½ the clock frequency: SMPTE ST 259.

Max. length = 20 dB loss at ½ the clock frequency: SMPTE ST 292 & ST 424.

Max. length = 40 dB loss at ½ the clock frequency: SMPTE ST 425, ST 2081, ST 2082 & ST 2083.

The bit error rate (BER) can vary dramatically as the calculated distances are approached. BER is dependent on receiver design and the losses of the actual coax used. Distribution and routing equipment manufacturers should be contacted to verify their maximum recommended transmission.

- 1) Includes cables that use 1855A as a constituent through 3 Gb/s, such as 7787A, 7788A, 7789A, 7790A, 7791A, 7792 A, 1855S3, 1855S5, 1855S6.
- 2) Includes cables that use 1506A as a constituent through 3 Gb/s, such as 1283S3, 1283S5, 1283S6.
- 3) Includes cables that use 1505A as a constituent through 3 Gb/s, such as 7794A, 7795A, 7796A, 7798A, 1505S3, 1505S5, 1505S6.
- 4) Includes cables that use 1694A as a constituent through 3 Gb/s, such as 1694WB, 7710A, 7711A, 7712 A, 7713A, 1694S5, 1694S6, 1694D.
- 5) Includes cables that use 1855ENH as constituent through 3 Gb/s, such as 1855EN3, 1855EN5, 1855EN6, 1855EN10.