

HD-SDI Cables | Accessories



HD-SDI (High Definition - Serial Digital Interface) Cables are designed and built for SMPTE broadcast video applications. These coaxial cables are built with high conductivity conductors, gas injected insulation and premium shielding. The SMPTE Standards range from 480i through 12G 4K resolutions, and require high quality cables to carry these signals.

Standards

Standard	Name	Bitrate	Video Format Resolutions
SMPTE 259M	SD-SDI	270Mb/s	480i
SMPTE 344M	ED-SDI	540Mb/s	480p
SMPTE 292M	HD-SDI	1.485Mb/s	720p 1080i
SMPTE 372M	Dual Link HD-SDI	2.970Gb/s	1080p60
SMPTE 424M	3G SDI	2.970Gb/s	1080p60
SMPTE 2081	6G SDI	6Gb/s	1080p120 2160p30
SMPTE 2082	12G SDI	12Gb/s	2160p60 4K Single Link

Bulk Cables: 12G SDI

Catalog No.	RG Size	Cond. Type & Nom. DCR	Insulation Type & Thickness	Shielding	Jacket Type & Thickness	Nom. O.D	NEC Type	Nom. VP	Nom. Impedance
			Inches			Inches			
6450	RG6/U	18 AWG Silver Copper	Gas Injected PE .180	Bi-Foil 100% Tinned Copper 95%	PVC	.275	CMR	85%	75 Ω
256450	RG6/U	18 AWG Silver Copper	Foamed FEP .168	Bi-Foil 100% Tinned Copper 95%	Plenum PVC	.229	CMP	85%	75 Ω
849R	RG59/U	20 AWG Silver Copper	Gas Inj. PE .145	Bi-Foil 100% Tinned Copper 95%	PVC	.233	CMR	85%	75 Ω
25849P	RG59/U	20 AWG Silver Copper	Foamed FEP .133	Bi-Foil 100% Tinned Copper 95%	Plenum PVC	.197	CMP	85%	75 Ω
HD843	Mini RG59/U	23 AWG Silver Copper	Gas Inj. PE .101	Bi-Foil 100% Tinned Copper 95%	PVC	.159	CMR	85%	75 Ω

BNC	
6450 and 256450	CN-BNC6-12G (1 pc. Compression)
849R	031-70546-12G (4 pc. Crimp)
25849P	031-70572-12G (4 pc. Crimp)
HD843	031-70537-12G (4 pc. Crimp)



Bulk Cable: 6G SDI



Catalog No.	RG Size	Cond. Type & Nom. DCR	Insulation Type & Thickness	Shielding	Jacket Type & Thickness	Nom. O.D	NEC Type	Nom. VP	Nom. Impedance
			Inches			Inches			
6350	RG6/U	18 AWG Bare Copper	Gas Injected PE .180	Bi-Foil 100% Tinned Copper 95%	PVC	.275	CMR	82%	75 Ω
256350	RG6/U	18 AWG Bare Copper	Foamed FEP .170	Bi-Foil 100% Tinned Copper 95%	Flex Plenum PVC	.236	CMP	83%	75 Ω

Connectors: BNC Male 6G

- DB6BNCHD-50**
- CN-BNC6MCV**



Catalog No.	RG Size	Cond. Type & Nom. DCR	Insulation Type & Thickness	Shielding	Jacket Type & Thickness	Nom. O.D	NEC Type	Nom. VP	Nom. Impedance
			Inches			Inches			
819	RG59/U	20 AWG Bare Copper	Gas Injected PE .142	Bi-Foil 100% Tinned Copper 95%	PVC	.232	CMR	82%	75 Ω
25819	RG59/U	20 AWG Bare Copper	Foamed FEP .135	Bi-Foil 100% Tinned Copper 95%	Flex Plenum PVC	.200	CMP	83%	75 Ω

Connectors: BNC Male 6G

- DB59BNCHD-50**
- CN-BNC59MCV**



Catalog No.	RG Size	Cond. Type & Nom. DCR	Insulation Type & Thickness	Shielding	Jacket Type & Thickness	Nom. O.D	NEC Type	Nom. VP	Nom. Impedance
			Inches			Inches			
HD823	Mini RG59/U	23 AWG Silver Copper	Gas Inj. PE .102	Bi-Foil 100% Tinned Copper 95%	PVC	.159	CMR	85%	75 Ω

Connectors: BNC Male

- CN-BNCP-825**

Estimated Transmission Distance at Serial Data Rates

The distances listed below are estimates based upon the cable loss values (excluding connectors or connectivity) in the SMPTE standards listed. West Penn Wire cannot guarantee that these distances will be obtained due to variations in the equipment used. The manufacturer of the equipment used should be contacted to determine what distance can be expected with the cable intended to be used

Data Rate:	270 Mb/s	360 Mb/s	1.5 Gb/s	3 Gb/s
Specs:	SMPTE ST 259	SMPTE ST 259	SMPTE ST 292	SMPTE ST 424
Application:	Component SD-SDI	Widescreen SD-SDI	HD 1.5G	HD 3G SDI
Cable Part Number	(ft)	(ft)	(ft)	(ft)
HD825	511	448	141	98
HD25825	500	430	133	90
HD823	774	622	217	150
HD843	890	640	250	177
819	1127	975	304	212
25819	1017	883	263	177
849R	1079	942	307	242
25849P	985	874	266	198
6350	1376	1203	367	255
256350	1319	1134	327	215
6450	1715	1512	494	343
256450	1570	1352	392	255

Data Rate:	3 Gb/s	6 Gb/s	12 Gb/s
Specs:	SMPTE ST 425-4 (3Gb/s - stereo) ST 2081-1 (6 Gb/s - dual link) ST 2082-1 (12 Gb/s - quad) ST 2083-1 (24 Gb/s - octal link)	ST 2081-1 (6 Gb/s - single link) ST 2082-1 (12 Gb/s - dual link) ST 2083-1 (24 Gb/s - quad link)	ST 2082-1 (12 Gb/s - single link) ST 2083-1 (24 Gb/s - dual link)
Application:	UHDTV1, UHDTV2	UHDTV1, UHDTV2	UHDTV1, UHDTV2
Cable Part Number	(ft)	(ft)	(ft)
HD823	—	—	—
HD843	—	246	165
819	425	287	—
25819	350	230	—
849R	445	302	208
25849P	375	233	183
6350	509	340	—
256350	430	280	—
6450	538	374	257
256450	433	285	186