CISCO™

Appendix A: Standards

SDI

Serial digital interface (SDI) refers to a family of video interfaces standardized by SMPTE. For example, ITU-R BT.656 and SMPTE 259M define digital video interfaces used for broadcast-grade video. A related standard, known as high-definition serial digital interface (HD-SDI), is standardized in SMPTE 292M. SDI uses Non-Return-to- Zero Inverted (NRZI) encoding.

Interface cables use BNC connectors and RG-59 cables.

SMPTE

The Society of Motion Picture and Television Engineers (SMPTE), is an international professional association of engineers working in the motion imaging industries. An internationally recognized standards developing organization, SMPTE has over 400 standards that define the Recommended Practices and Engineering Guidelines for television, motion pictures, digital cinema, audio and medical imaging.

Table 1   Select SMPTE Standards

Standard	Name	Bit Rates	Example Video Formats
SMPTE 259M	SD-SDI	270 Mbps, 360 Mbps, 143 Mbps, and 177 Mbps	480i, 576i
SMPTE 344M		540 Mbps	480p, 576p
SMPTE 292M	HD-SDI	1.485 Gbps, and 1.485/1.001 Gbps	720p, 1080i
SMPTE 372M	Dual Link HD-SDI	2.970 Gbps, and 2.970/1.001 Gbps	1080p
SMPTE 424M	3G-SDI	2.970 Gbps, and 2.970/1.001 Gbps	1080p
SMPTE 2082	12G-SDI	12 Gbps	2160P60

SMPTE