

One HD-SDI Fiber Transport Kit with Return RS-485

Single fiber transport for HD-SDI, SD-SDI, or DVB-ASI with Serial Data



The F-M1SDI kit includes a transmitter and a receiver unit. The transmitter provides one input for serial digital video on BNC terminals. The platform will support any SDI or ASI signal up to a 1.5 Gbps data rate. The RS-485 terminal block provides return path serial data from the receiver back to the Tx.

The standard unit without options provides one directional RS-485 data from the receiver unit to the transmitter. This can be used for control applications such as PTZ controllers or video switches. This also allows a return path that provides a link alarm indicator on both units that indicates when an optical link is not present. Unless specified, the standard optics provide a transport range of up to 20 km. Units are available with optics for 10, 20, 40, or 80 km transport distances. This must be specified at the time of ordering.

Product Specifications and Information Table

HD-SDI Interface		RS485 Interface	
Connector	1x BNC	Connector	Terminal Block connector
Bit rate	1.485Gb/s	Baud rate	0 ~ 115.2Kb/s
Impedance	75Ω	Bit error ratio	<10 ⁻⁹
Return loss	>15dB	Duplex	Half-duplex
Output level	800mVp-p±10%	Power Consumption	
Rise and fall time (HD-SDI)	≤270ps	Power supply	DC 12V
HD-SDI Alignment jitter (100KHz)	≤0.2UI	DC input voltage range	8V~14V
HD-SDI Timing jitter (10Hz)	<1.0UI	Power consumption	3W±10%
Standard	SMPTE-292M HD-SDI	Environmental	
Audio Interface (Optional)		Working temperature	-30 ~ 60°C
Connector	Terminal Block	Relative Humidity	≤95%, no condensation
Impedance	high-impedance 600Ω	Storage temperature	-40 ~ 85°C
Bandwidth	20Hz~20KHz	Dimensions	
Total Harmonic Distortion	0.1%	Desktop Enclosure	93.2mm×46.2mm×29.6mm