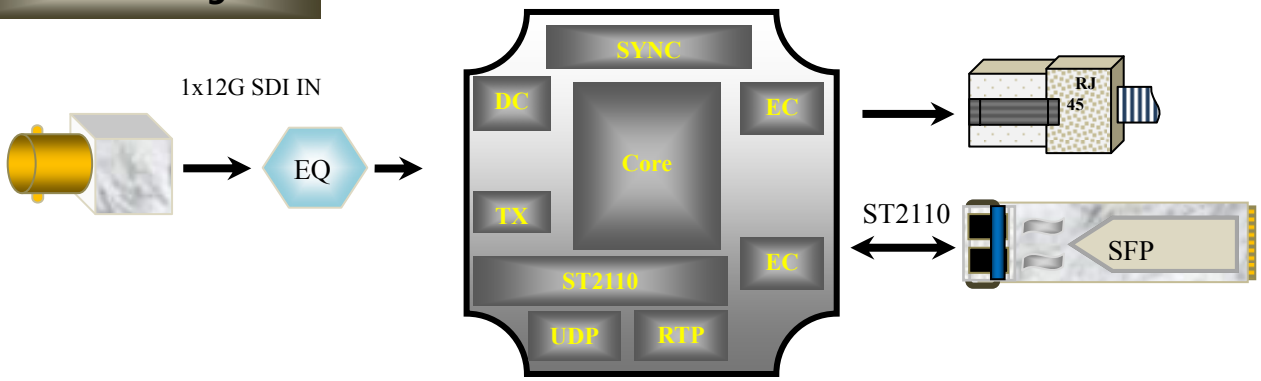
Version: 0.5

DM503-TS 25G ST2110/1x12G SDI Uncompressed Video Converter



Functional Diagram



Product Introduction

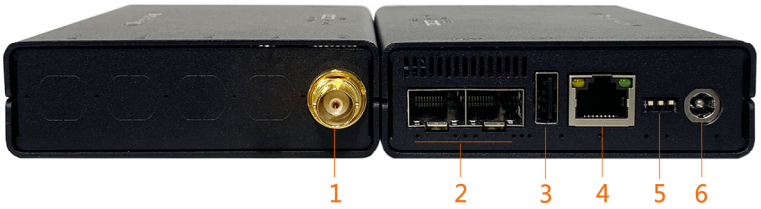
The DM503-TS is a 25G ST 2110 / 1x12G SDI uncompressed video converter. It supports one video capture channel and can output video to an ST 2110 IP broadcasting system via an SFP28 (25Gb Ethernet) interface. The product is designed specifically for high-quality video processing scenarios.

The DM503-TS is equipped with multi-rate interfaces and supports multiple video formats, including 720p, 1080i, 1080p, and 2160p. It comes standard with one 12G-SDI port and two SFP28 (25Gb Ethernet) ports, with optional PoE power supply. The device is compatible with the ST 2110-20/30/40 and ST 2022-7 streaming protocols, enabling ultra-high-definition uncompressed video transmission with ultra-low signal conversion latency, making it ideal for integration into real-time IP live production environments.

Key Features

- Equipped with two bidirectional SFP28 (25G) network interfaces. When operating at 25G, it is recommended to directly connect the dedicated SFP28 ports to external devices; otherwise, compatibility may be degraded.
- The network interfaces support the NMOS protocol and web-based management, with optional PoE power supply.
- SDI input resolution is auto-adaptive, supporting up to 4K60 and backward compatible with lower resolutions.
- Supports PTPv2 and ST 2059-2.
- The dual SFP28 ports support 25GigE SFP modules and ST 2022-7 redundancy.

Interfaces



No.	Interface	Function
1	SDI	SDI Input
2	SFP28	25Gx2
3	USB	Firmware Upgrade
4	RJ45	Network management, 100M, optional POE power supply
5	DIP	Reserved
6	Power	DC 12V

Product Specifications

Product Name	**25G ST 2110 / 1×12G SDI Uncompressed Video Converter**	
Product Model	**DM503-TS**	
Video Format	HD Video Formats	720p50, 720p59.94, 720p60, 1080i50, 1080i59.94, 1080i60, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60
	Ultra HD Video Formats	2160p23.98, 2160p24, 2160p25, 2160p29.97, 2160p30, 2160p47.95, 2160p48, 2160p50, 2160p59.94, 2160p60
	SDI Standards	SMPTE 292M, SMPTE 296M, SMPTE 424M, SMPTE 425M Level A, SMPTE 2081/2082
	Audio Sampling	48 kHz sampling rate, 24-bit
	Color Precision	10-bit YUV 4:2:2
	Color Space	Rec. 709, Rec. 2020
IP Video Specifications	SMPTE 2110-20 **(Uncompressed Video)**	IGMP v2/v3
	SMPTE 2110-21 **(Traffic Shaping)**	Sender: Narrow
	SMPTE 2110-30 **(PCM)**	48 kHz sampling rate, 24-bit
	SMPTE 2022-7	Dual redundant primary/backup links with seamless video
	NMOS IS-04 **(Discovery and Registration)**	v1.3.2 via mDNS/DNS-SD P2P
	NMOS IS-05 **(Connection Management)**	v1.1.2
	NMOS BCP-002-01	Natural grouping
Software	Built-in Software	Web control
General Specifications	Power Supply	DC 12V
	Dimensions	134 × 92 × 29 mm
	Weight	0.32 kg
	Operating Temperature	0°C to 50°C, non-condensing
	Storage Temperature	-20°C to 75°C
	Operating Humidity	20% to 70% RH

Application

