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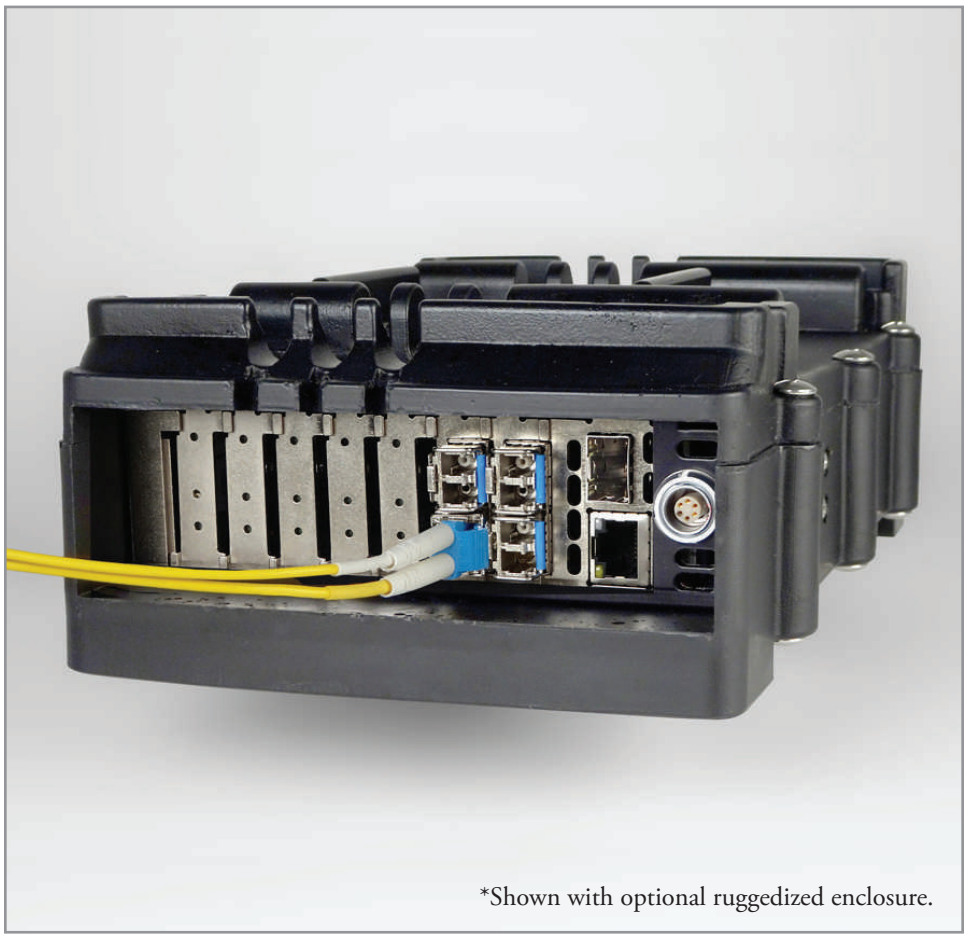
µWRAP 25G

High-speed record / playback for up to 24 TB of optical data



*Shown with optional ruggedized enclosure.

Description

The µWRAP 25G is a compact system for recording and playback of up to two real-time 12.5 Gb/s datastreams with framed data capture. With 12 or 24 TB of data storage and two high speed optical interfaces, it provides a reduced size, weight, and power (SWaP) record / playback solution in a small, self-contained system.

Each optical blade has one SFP/+ to record and play back up to 10 GbE, STM64, or OTU2f, plus FPGA resources for framing, aligning, and descrambling datastreams. The SFP/+ also supports PCAP record-playback for 10 GbE.

The open system is powered by an AMD G-series processor (x/86 architecture) running Linux with 256 GB system storage with 8 GB DDR3 SDRAM.

System control is via multiple ethernet ports. Command and control operations are exposed via a RESTful interface for easy tool integration.

Features

- Compact system for recording and playback of data in real time
- Reduces SWaP by eliminating the need for a host computer
- Data formats (via SFP/+ ports): 1–10 GbE; STM1–64; OTU1/2/2e/2f
- Data rates: Up to two 12.5 Gb/s datastreams, with framing
- Storage (SSDs): 2 or 4 (6 TB each, 12 or 24 TB total)
- Processor: AMD G-series
- Processor memory: 8 GB
- Operating system: Linux
- Available: EDT uWRAP 25G software
- EDT intellectual property for 10 GbE PCS and PMA layers, SONET/SDH framing, demultiplexing, G.709 framing

Applications

- High-speed recording and playback
- Telecom testing
- Simulation
- Network analysis

Engineering Design Team, Inc. | 3423 NE John Olsen Ave., Hillsboro, Oregon 97124 USA | Tel: +1-503-690-1234 (800-435-4350) | Fax: +1-503-690-1243 | info@edt.com | edt.com

Specifications

Supported Formats	STM4/16/48, OTU1/2/2e/2f				
Data Storage	NVMe SSD		12 or 24 TB		
System Processor	**Device (x86-based)**	**Cores**	**Clock rate**	**Shared L2 cache**	**GPU clock rate**
	AMD GX-210HA (default)	2 (10 W total)	1.0 GHz	1 MB	300 MHz
	AMD GX-420CA (optional)	4 (25 W total)	2.0 GHz	2 MB	600 MHz
System Storage	SSD		256 GB		
System Memory	SDRAM: DDR3		8 GB		
Network Boot Protocol	iSCSI				
Transceivers	On each of the one or two optical interfaces, Port 0 supports one SFP/+ transceiver with the options shown below.				
	PORT 0	**ELECTRICAL (1GbE) SFP only**	**OPTICAL SFP/+***	**SFP/+***	**SFP/+***
			1550 nm	**1310 nm**	**850 nm**
	Output power (dBm)	–	–2 to +3 / 0 to +4	–9.5 to –3 / –8.2 to +0.5	–9 to –2.5 / –5 to –1
	Center wavelength (nm)	–	1500–1580 / 1530–1565	1270–1360 / 1260–1355	830–860 / 840–860
	Sensitivity (dBm)	–	–28 / –23	–18 / –10.3	–18 / –7.5
	Max. input power (dBm)	–	–9 / –7	0 / +0.5	0 / +0.5
	Connector	RJ45 transceiver	LC	LC	LC
	* An **SFP** at 1550, 1310, or 850 nm can support 1 GbE, OC3/12/48 (STM1/4/16), or OTU1. An **SFP+** at 1550 or 1310 nm can support 10 GbE, OC192 (STM64), or OTU2/2e/2f – or, at 850 nm, 10 GbE only.				
System Interfaces	System control, 1 GbE		RJ45		
	System control, 1 GbE		SFP		
	System control, USB 2.0 x2, not intended for normal use		microUSB		
	System display, not intended for normal use		DisplayPort++ (with conversion cable, allows for DVI, HDMI, or VGA)		
	Data I/O		SFP/+ transceiver (x2) - for data formats shown above		
Power	Input voltage range		10–60 VDC		
	Consumption (dependent on configuration)		Typically 100 W with two optical interfaces		
	Power control		100 MbE, RJ45 connector		
	Power input		10–60 VDC, 6-pin Lemo connector		
Physical	Weight		TBD - about 3.25 lbs. (with six SSD blades installed)		
	Dimensions		9.60 x 5.75 x 1.61 in. (including connectors)		
Environmental	Temperature (operating / non-operating)		0° to 55° C / -40° to 70° C (ambient)		
	Humidity (operating / non-operating)		1% to 90%, non-condensing at 40° C / 95%, non-condensing at 45° C		
System	Operating System		CentOS 7		
	Record / Playback, utilities and control		Via Pre-installed GUI and command-line applications		

Ordering Options

- Data storage: **2** / 4 SSD blades (6 TB ea.)
- Transceivers: [see options above]
- Ruggedized enclosure: **0** / 1

Bold is default. **Ask** about custom options.