WRAP 10G *Plus*
Wideband record-and-playback system for 10 Gb/s, second generation

Description

The WRAP 10G *Plus* is a powerful, flexible computer system for clear-bit recording and playback of up to 10 Gb/s of data in real time acquired through an EDT optical I/O board.

The WRAP 10G *Plus* is the next generation WRAP 10G, and is fully backwards compatible with the original version, but with more memory, higher speed PCIe 3.0 bus, and two fast processors, making it an ideal platform for post-capture signal processing.

The 3U system has two Intel Xeon E5-2620 V4 processors, and 128, 256 or 512 GB of fast DDR4 system memory. Greatly extended recording times are enabled via sixteen qualified and tested disk drives of 1 or 2 TB each, providing 16-32 TB of raw data storage. The disk drives are removable via the front panel.

Included is the EDT WRAPSODY software, which provides device drivers, application code, utilities and libraries.

The WRAP system supports remote operation, and it uses commercial off-the-shelf (COTS) components to allow field upgrades as technology evolves.

Optional WRAP Packs (sixteen additional disk drives each) are also available.

Features

Computer system for clear-bit and framed recording and playback of data in real time

Optimal platform for recording from EDT optical I/O boards

Supports OC3/STM1 – OC192/STM64, OTU1/2/2e/2f, 1/10 GbE

Data rates of up to 1.25 GB/s with rotating media, depending on configuration

Storage of up to 32 TB raw data on removable rotating media, with no compression loss and no time inconsistencies

Two Intel Xeon E5-2620 V4 processors

128, 256 or 512 GB system memory

WRAPSODY software with device drivers, application code, utilities and libraries

Optional WRAP Packs of sixteen additional disk drives each

Applications

High-speed recording and playback

Telecom testing

Simulation

Specifications

System Processor	Intel Xeon E5-2620 V4	Two
System Memory	DDR4 SDRAM	128, 256 or 512 GB
Data Storage	Disk drives	16 drives of 1 / 2 TB each for raw data storage of 32 TB, up to 10Gb/s*
		* Maximum sustained record/playback is dependent on data format, RAID configuration and aggregate system load.

Data Format (I/O)	**Signals**	**#Ports**	**Interface board set***
	1/10 GbE, OC3/12/48/192 (STM1/4/16/64), OTU1/2/2e/2f	1-3	PCIE8 LX 3P
	* Detailed board specifications are available on separate PCIe8 LX 3P datasheet.		

Recording Times	Recording times may vary depending on data format and other variables. Below are sample recording times for some common formats.	
	Data format	**Available disk area / recording time**
	OC192/STM64	8 TB = 100 minutes
	OC48/STM16	16 TB = 13 hours
	OC12/STM4	16 TB = 53 hours
	OC3/STM1	16 TB = 213 hours

System Interfaces	Video	1x VGA port
	USB	4x USB 3.0 (2 rear + 2 via header), 5x USB 2.0 (2 rear + 2 via header + 1 type A)
	LAN	2x RJ45 Gbit Ethernet LAN ports, 1x RJ45 dedicated IPMI LAN port
	Serial	2x fast UART 16550 port / 1 header

Optional Accessories	WRAP PACK 10G (sixteen additional disk drives)	

Physical	Weight	77 lbs.
	Dimensions	5.25" (3U) x 17.25" (inside rails) x 26.5" (27.5" with front panel and handles)

Environmental	Temperature (operating / non-operating)	0° to 40° C / -40° to 70° C
	Humidity (operating / non-operating)	1% to 90%, non-condensing at 40° C / 95%, non-condensing at 45° C

System and Software	System comes preloaded with Linux operating system, EDT board device drivers, libraries, utilities and WRAPSODY software.	

Ordering Options

- Memory: **128** / 256 / 512 GB
- Storage: **16** disk drives, each 1 TB / **2 TB**
- WRAP PACK 10G (16 additional 1 or 2 TB disk drives), **0** / any
- Rails: 0 / **1** rack-mount pair

Bold is default. For more options, see mezzanine & main board detail.
Ask about custom options.

Contact EDT to discuss engineer-to-engineer support, from phone consults to custom design of hardware, firmware, or software.   20190221