TOSHIBA

Toshiba announces new 16TB Enterprise Capacity Hard Disk Drives – MG08 Series

Industry's largest capacity 16TB hard disk drives

deliver new level of storage density and improved power efficiency.

Düsseldorf, Germany, 08. January 2019 - Toshiba Electronics Europe GmbH announces Enterprise Capacity Hard Disk Drives - MG08 Series, the industry's largest capacity 16TB[1] [2] Conventional Magnetic Recording (CMR) HDD. With 33% more capacity than today's widely adopted 12TB drives, and 14% more capacity than prior 14TB models, MG08 16TB drives are compatible with the widest range of applications and operating systems, and adapted to mixed random and sequential read and write workloads in both cloud and traditional datacenter environments.

The MG08 Series is Toshiba's second-generation helium-sealed HDD family, and eighth-generation Enterprise Capacity HDD family. "Toshiba has delivered its industry-leading 16TB

capacity and improved power efficiency by utilizing the 9-disk helium design, introduced last year in 14TB models, and its own advanced precision laser welding process to ensure the helium remains sealed inside the drive case," comments Larry Martinez-Palomo, General Manager, HDD Business Unit, Toshiba Electronics Europe.

The MG08 features 7,200rpm performance, a 550TB per year workload rating[3], a 2.5 million-hour MTTF[4], a 512Mib cache buffer[5], and a choice of SATA and SAS interfaces—all in an industry-standard, 3.5-inch[6] form factor.

The MG08 Series further illustrates Toshiba's commitment to advancing HDD design to meet the evolving needs for storage devices suited for use in cloud-scale servers and storage infrastructure. As data growth continues at an explosive pace, the industry-leading 16TB CMR capacity will help cloud-scale service providers and storage solutions designers to achieve higher storage densities for cloud, hybrid-cloud and on-premises rack-scale storage. Larry Martinez-Palomo from Toshiba Electronics Europe adds: "With its improved power efficiency and 16TB capacity, the MG08 Series will help lower the TCO of storage infrastructure designed for applications such as data-protection, big data aggregation, content serving and digital archiving."

Shipments of samples of 16TB MG08 Series drives to customers will begin sequentially in Q1.

Follow the link below for more on the new 16TB Enterprise Capacity Hard Drive - MG08

Series:

https://toshiba.semicon-storage.com/eu/product/storage-products/enterprise-

hdd/mg08.html

Follow the link below for more on Toshiba's HDDs line-up:

https://toshiba.semicon-storage.com/eu/product/storage-products/enterprise-hdd.html

[1] Source: Toshiba Electronics Europe GmbH, as of January 8, 2019.

[2] Definition of capacity: Toshiba defines a megabyte (MB) as 1,000,000 bytes, a gigabyte (GB) as 1,000,000,000 bytes and a terabyte (TB) as 1,000,000,000,000 bytes. A computer operating system, however, reports storage capacity using powers of 2 for the definition of $1GB = 2^{30} = 1,073,741,824$ bytes and therefore shows less storage capacity. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system, such as Microsoft Operating System and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

[3] Workload is a measure of the data throughput in a year, and it is defined as the amount of data written, read or verified by commands from the host system.

[4] MTTF (Mean Time to Failure) is not a guarantee or estimate of product life; it is a statistical value related to mean failure rates for a large number of products which may not accurately reflect actual operation. Actual operating life of the product may be different from the MTTF.

[5] A mebibyte (MiB) means 2^{20}, or 1,048,576 bytes.

[6] "3.5-inch" means the form factor of HDDs. It does not indicate a drive's physical size.

About Toshiba Electronics Europe

Toshiba Electronics Europe GmbH (TEE) is the European electronic components business of Toshiba Electronic Devices and Storage Corporation. TEE offers European consumers and businesses a wide variety of innovative hard disk drive (HDD) products plus semiconductor solutions for automotive, industrial, IoT, motion control, telecoms, networking, consumer and white goods applications. The company's broad portfolio encompasses integrated wireless ICs, power semiconductors, microcontrollers, optical semiconductors, ASICs, ASSPs and discrete devices ranging from diodes to logic ICs.

TEE has headquarters in Düsseldorf, Germany, with branch offices in Germany, France, Italy, Spain, Sweden and the United Kingdom providing design, manufacturing, marketing and sales. The company's president is Mr Tomoaki Kumagai.

For more company information visit TEE's web site at www.toshiba-storage.com.

Contact details for publication:

Toshiba Electronics Europe GmbH, Hansaallee 181, D-40549 Düsseldorf, Germany

Tel: +49 (0) 211 5296 0

Web: www.toshiba-storage.com;

toshiba.semicon-storage.com

E-mail: spdinfo@tee.toshiba.de

Contact details for editorial enquiries:

Julia Lepping, Toshiba Electronics Europe GmbH

Tel: +49 (0) 211 5296 314

E-mail: JLepping@tee.toshiba.de

Issued by:

Birgit Schöniger, Publitek

Tel: +44 (0) 208 429 6554

Web: www.publitek.com

E-mail: birgit.schoeniger@publitek.com