

microDDP

The Ethernet SAN solution
for Outside Broadcast



- 8 SSDs of 1 or 2 TB
- RAID5
- 7x 1GbE
- 5 kg / 1U
- 700 MB/s
- 29 cm

microDDP1GbE



- 8 SSDs of 1 or 2 TB
- RAID5
- 2x 1GbE
- 2x 10GbE/RJ45
- 5 kg / 1U
- 2200 MB/s
- 25,5 cm

microDDP10GbE



Is your company involved in using OB Vans, SNG cars and or ENG teams or other ways to do outside registrations? Registrations such as sports events, news, festivals, business presentations, film shoots? There are more and more outside registrations with more and more cameras with more and more content to be handled and judged before it can be released. Also in more and more cases immediate checking and editing of material is required.

The ability to ingest and edit material (edit while ingesting) on location with the smallest silent and fastest setup against the best rental price in the shortest time with the highest picture quality is a key decision factor. High picture quality requires high bandwidth. SAN systems deliver the highest bandwidth. These requirements call for an easy, fast and lightweight Ethernet SAN shared storage solution.

Recently at IBC 2015 Ardis Technologies introduced the microDDP series of Ethernet San shared storage systems. The microDDP series fulfills the requirements mentioned. There are two versions. Each is 1U, 19 inch, 5Kg (11 LBS) and can have 7 or 14 TB raid5-protected SSD (solid state disk) storage.

MicroDDP1GbE has seven 1GbE / RJ45 ports built-in and a bandwidth up to 700 MByte/s.

MicroDDP10GbE comes with two 1GbE and two 10GbE/RJ45 ports and has a bandwidth up to 2200 MByte/s. The 10GbE ports can also be used as 1GbE ports. These 25,5 cm (10") and 29 cm (11,4") in depth DDPs run the full DDP software package.

SSDs are still perceived to be expensive with limited capacity. Not so long ago however 1TB and 2TB SSD came on the market with prices much better then the prices of fast rotating (10K) spinning disks. SSDs are small, hardly produce heat but most importantly there is no seek time.

www.ddpsan.com

So what does this mean for the amount of data, which can be stored and how many users are able to work simultaneously?

7 TB effective capacity is enough to hold 70 hours of ProRes HQ or DNxHD220 video material or approximately 300 hours of DNxHD45 or more than 100 hours of Pro Tools 100 track sessions.

The bandwidth of the microDDP1GbE is enough to stream 25 streams of ProResHQ/DNxHD220 or some 100 streams of lower video formats such as DNxHD45 or 15 streams of Red R3D material. The 7 x 1GbE ports can be connected to laptops, desktops and workstations without the necessity of a 1GbE switch. Making it very easy to handle in the field.

The Stream Count of the microDDP10GbE with 7 TB is shown in the picture together with the Capacity in Hours for various video, film and audio formats. Ports can be connected to a simple 1 or 10GbE/RJ45 switch to extend the range of clients connected. The bandwidth of the microDDP10GbE is limited by the summed bandwidth of the Ethernet ports: 2200 MByte/s. This bandwidth is not influenced by video, audio or film format, nor influenced by whether it is streaming, push/pull or IOs. So if your format is not listed simply divide 2200 by your format to get the number of streams, IOPS, which can be run simultaneously.

Video, Film or Audio Format	Stream Count microDDP 1GbE	Capacity in Hours
4K, UHD, 3840x2160, 10 bit, 25 fr/s, 840 MB/s	2	2
2K, uncompressed, 10 bit, 2048x1556, 24 fr/s, 320 MB/s	4	6
4K, R3D, 40 MB/s	50	45
4K, Sony XAVC422, 10 bit, 30 MB/s	67	55
DNxHD220, 28 MB/s	70	55
ProRes HQ, 1080i60, 720p60, 1080p30, 28 MB/s	70	60
DNxHD185, 24 MB/s	83	70
ProRes HQ, 1080i50, 720p50, 1080p25, 24 MB/s	83	70
SD, uncompressed, 8 bit, 21 MB/s	95	90
DNxHD145, 18 MB/s	111	100
HDCAM, 20 MB/s	100	100
ProRes, 1080i60, 720p60, 1080p30, 18 MB/s	111	100
ProRes LT, 1080i60, 720p60, 1080p30, 13 MB/s	154	140
ProRes 422, 1080i50, 720p50, 1080p25, 11 MB/s	180	165
AVC-intra100, DVCPProHD100, DV100, 12 MB/s	167	165
AVC-intra50, IMX50, AVCHD, DVCPPro50, 6 MB/s	333	305
DV25, XDCAM HD, XDCAM EX, IMX30, MPEG30, 4 MB/s	500	460
MPEG2, OffLineRT, 1 MB/s	2000	1800
Audio, 24 bit, 48 KHz, 100 tracks, 15 MB/s	133	115
Audio, 24 bit, 96 KHz, 100 tracks, 30 MB/s	67	50

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