

## The best Ethernet SAN solution for outside Broadcast microDDP1GbE and microDDP10GbE

Is your company involved in using OB Vans, SNG cars and or ENG teams or other ways to do outside regi-strations? 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.



microDDP1GbE

- 4 or 8 SSDs of 1, 2, 4 or 8 TB
- RAID5
- 6x 1GbE + 2x 10GbE / SFP+
- 1U / 11lbs / 5kg
- 11" / 29 cm
- 1000 MB/s
- 80W



microDDP10GbE

- 4 or 8 SSDs of 1, 2, 4 or 8 TB
- RAID5
- 2x 1GbE
- 2x 10GbE / RJ45
- 1U / 11 lbs / 5kg
- 10" / 25,5 cm
- 2200 MB/s
- 80W

Connectors can be on front or rear of both models

*Hand-carriable*      *Very quiet*      *Low power*

### Edit while ingesting

The ability to ingest and edit material 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 Ardis Technologies introduced their new 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 8, 16 or 64 TB RAID5-protected SSD (solid state disk) storage.

**microDDP1GbE** has 6x 1GbE + 2x 10GbE / SFP+ ports built-in and a bandwidth of 1000 MByte/s.

**microDDP10GbE** has 2x 1GbE + 2x 10GbE / RJ45 ports and 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 than the prices of fast rotating (10K) spinning disks. SSDs are small, hardly produce heat but most importantly there is no seek time.

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**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 and Capacity in Hours for various video, film and audio formats**

The right picture shows the microDDP10GbE. Ports can be connected to a simple 1 or 1/10GbE / 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.

If your format is not listed here simply divide 2200 by your format to get the number of streams, which can be run simultaneously.

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Video, Film or Audio Format	Stream Count microDDP 10GbE	Capacity in hours with SSD8, 2TB pack
4K, UHD, 3840x2160, 10 bit, 25 fr/s, 840 MB/s	2	4
2K, uncompressed, 10 bit, 2048x1556, 24 fr/s, 320 MB/s	4	12
4K, R3D, 40 MB/s	50	90
4K, Sony XAVC422, 10 bit, 30 MB/s	67	110
DNxHD220, 28 MB/s	70	110
ProRes HQ, 1080i60, 720p60, 1080p30, 28 MB/s	70	120
DNxHD185, 24 MB/s	83	140
ProRes HQ, 1080i50, 720p50, 1080p25, 24 MB/s	83	140
SD, uncompressed, 8 bit, 21 MB/s	95	180
DNxHD145, 18 MB/s	111	200
HDCAM, 20 MB/s	100	200
ProRes, 1080i60, 720p60, 1080p30, 18 MB/s	111	200
ProRes LT, 1080i60, 720p60, 1080p30, 13 MB/s	154	280
ProRes LT, 1080i50, 720p50, 1080p25, 11 MB/s	180	330
AVC-intra100, DVCPProHD100, DV100, 12 MB/s	167	330
AVC-intra50, IMX50, AVCHD, DVCPPro50, 6 MB/s	333	610
DV25, XDCAM HD, XDCAM EX, IMX30, MPEG30, 4 MB/s	500	920
MPEG2, OffLineRT, 1 MB/s	2000	3600
Audio, 24 bit, 48 KHz, 100 tracks, 15 MB/s	133	230
Audio, 24 bit, 96 KHz, 100 tracks, 30 MB/s	67	100