

DDS

DDS data cartridges: high capacity, compact, and versatile for a wide range of applications and platforms



DDS lineup—Sony technology makes it possible

A single tiny DDS4 cartridge (DGD150P) holds a massive 20GB of uncompressed data. Key to such high-density storage is Sony's helical scan technology, originally developed for video applications.

Outstanding durability and tape travel stability

Sony's highly durable HCL (High Cross Linkage) binder raises reliability and durability to withstand the stress of repeated use. In addition, Sony's RDP mechanism sandwiches the tape between textured sheets to support smooth tape winding. The cartridge lid is made of strong plastic to protect the tape against accidental drops or mechanical shock.

Unique low torque cartridge

As tape winds onto a reel, torque rises along with diameter. To minimize this torque effect in fast-forward and rewind search modes, Sony uses special designs for the DDS hubs, lower sheet, and lower shell. The shell also improves overall cartridge strength to minimize potential deformation under external stress.

Thin dual-layer coating technology

Sony DDS3 and DDS4 tapes use a dual-layer coating comprising an ultra-thin magnetic layer and a nonmagnetic layer. The ultra-thin magnetic layer provides high output even in the high frequency range essential for high-density recording. The nonmagnetic layer creates a smooth surface to support tape travel stability and durability.

Ultra-fine magnetic particles

Although smaller magnetic particles are more difficult to disperse within the binder, Sony's high dispersion technology achieves outstanding results even with ultra-fine particles. The magnetic particles for DDS3 and DDS4 tapes are approximately 0.1µm (100nm), but the output value for the shortest recorded wavelength is 5dB or higher than that of DDS2.

MODEL NAME	DG60P	DG90P	DGD120P
GENERAL CHARACTERISTICS			
Format	DDS1		DDS2
Magnetic Material	Metal HDA		HESA
Recording Density (kftpm)	3,000 (76kftpi/61kbp)		
Recording Capacity (Compressed*)	1.3GB (2.6GB*)	2.0GB (4.0GB*)	4.0GB (8.0GB*)
MAGNETIC CHARACTERISTICS (NOMINAL)			
Residual Magnetic Flux Density (mT)	250		295
Coercive Force (kA/m)	121		130
PHYSICAL CHARACTERISTICS (NOMINAL)			
Tape Width (mm)	3.81		
Tape Thickness (µm)	13.0	9.0	6.8
Tape Length (m)	60	91	120
ENVIRONMENTAL REQUIREMENTS			
Operation Conditions (*F(°C);%RH)	59–131 (15–55);10–80**		
Storage Conditions (*F(°C);%RH)	41–89.6 (5–32);20–60**		
Transportation Conditions (*F(°C);%RH)	-40–113 (-40–45);5–80**		
DIMENSIONS			
External Dimensions (mm)	73.0x54.0x10.5		
Weight (g)	44 (with case)		

MODEL NAME	DGD125P	DGD150P
GENERAL CHARACTERISTICS		
Format	DDS3	DDS4
Magnetic Material	MP++	MP+++
Recording Density (kftpm)	6,000 (152kftpi/122kbp)	
Recording Capacity (Compressed*)	12.0GB (24.0GB*)	20.0GB (40.0GB*)
MAGNETIC CHARACTERISTICS (NOMINAL)		
Residual Magnetic Flux Density (mT)	390	400
Coercive Force (kA/m)	190	195
PHYSICAL CHARACTERISTICS (NOMINAL)		
Tape Width (mm)	3.81	
Tape Thickness (µm)	6.8	5.6
Tape Length (m)	125	150
ENVIRONMENTAL REQUIREMENTS		
Operation Conditions (*F(°C);%RH)	59–131 (15–55);10–80**	
Storage Conditions (*F(°C);%RH)	41–89.6 (5–32);20–60**	
Transportation Conditions (*F(°C);%RH)	-40–113 (-40–45);5–80**	
DIMENSIONS		
External Dimensions (mm)	73.0x54.0x10.5	
Weight (g)	44 (with case)	

* 2:1 Compression ratio.

** Maximum wet bulb temperature: 79°F(26°C) at no condensation.