

IBM 7208-222 External 8mm Tape Drive

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IBM U.S. Product Life Cycle Dates

Type Model	Announced	Available	Marketing Withdrawn	Service Discontinued	Replaced By
7208-222	1994/10/04	1994/11/25	1998/06/26	2003/12/31	7208-342

Abstract

The IBM 7208 is an External 8-mm Tape Drive that provides additional function and enhancement capabilities to the AS/400 and RS/6000.

Model Abstract 7208-222

(For IBM US, No Longer Available as of June 26, 1998)

The IBM 7208 External 8-mm Tape Drive Model 222 is a stand-alone, 8-mm cartridge tape drive with a capacity of up to 7GB per cartridge. The 7208 model 222 supports the 160-meter data cartridge. The 160-meter data cartridge is not supported in 7208 models 002, 012, and 232. The 7208-222 is available in two colors. White (F/C 9200) and black (F/C 9100) feature codes are available to match the color of the host AS/400 to which it will be attached. Color must be specified on the initial plant order. The 7208 model 222 attaches to all D, E, F, 20S, 30S, 200, 300, 310, and 320 models of the AS/400 with V3R1 Operating System with the exception of models D02 and E02. The 7208 model 222 is intended for system operations that require saving large amounts of data, unattended save/restore, and 8-mm tape interchange with other AS/400 systems. It has an instantaneous data transfer rate of 500KB per second. The 7208 model 222 features data compression hardware using an adaptation of IBM's IDRC algorithm which provides an effective capacity of up to 14GB of data per cartridge and an increased effective data rate of 1MB per second depending on the type of data being transferred. Alternate Initial Program Load (AIPL) is supported on all models except the 9402 Models D04 and D06, and the 9404 Models D10 and D20.

The 7208 Model 222 is not upgradable to a 7208 Model 232. The 7208 Model 222 is both read and write compatible with other 7208 models 002, 012, 232, and AS/400 Advanced Series internal tape feature (#6390).

Note: Data compression values are data and application dependent. Actual end user results may vary.

Highlights

- Is an external stand-alone tape-drive device.
- Attaches via SCSI cable.
- Uses an SCSI interface for attachment to RS/6000 (7208 models 001, 011, and 341), or uses a differential SCSI interface for attachment to AS/400 (7208 models 002, 012, 222, 232, 234 and 342).

Model Highlights 7208-222

- Offers increased storage capacity per cartridge over the 7208 models 012 and 232.
 - Provides Improved Data Recording Capacity (IDRC) effectively doubling data capacity and transfer rate.
 - Uses the longer (160 meter) 8-mm data cartridges in addition to 112 meter data cartridge.
 - Is read/write compatible with 7208 models 002, 012, 232, and AS/400 Advanced Series feature (#6390) for full interchange capability.
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Description

USER PRODUCTIVITY:

User productivity is enhanced with the larger storage capacity offered by the 7208 Model 222. With a media storage capacity of 7GB per cartridge combined with the data compression employed in this new model, the 7208 model 222 is an excellent unattended save/restore device.

PERFORMANCE:

The following is a comparison of the model 222 to the model 012 and 232 unattended save rate and capacity/cartridge:

Maximum Unattended

Compressed

Capacity/Cartridge	Save rate	
-----	-----	-----
Model 222 (IDRC enabled)	2.5 GB/HR	up to 14GB
Model 012 (IDRC enabled)	2.5 GB/HR	up to 10GB
Model 232 (IDRC enabled)	2.5 GB/HR	up to 10GB

This data is based on laboratory calculations and individual user results may vary.

CAPACITY - Increased capacity:

The 7208 model 222 has IDRC data compression that typically provides up to 14GB of data per cartridge.

Product Positioning

The 7208 model 222 should be used where there is a need for higher capacity than that offered on the 7208 model 012. The 7208 model 222 allows the customer added capacity over the model 012 and a less costly alternative to the higher priced, higher function 7208 model 232 dual drive which features tape copy and compare among other features.

Model

Model Summary Matrix

Effective Transfer Model Rate	Attaches to	Media	Data		
		Capacity (Cartrdg)	Effective Capacity	Transfer Rate	
-----	-----	-----	-----	-----	-----
222	AS/400	7.0GB	14.0GB	500KB/sec	
1MB/sec					

Maximum

Not applicable.

Customer Setup (CSU)

None.

Devices Supported

Not available.

Model Conversions

None.

Technical Description

The 7208-222 is an 8-mm helical scan streaming cartridge tape drive with a media capacity of up to 7GB per cartridge. The 7208 model 222 supports 160-meter data cartridge. The 160-meter data cartridge is not supported in 7208 models 012 and 002. The 7208 model 222 attaches to all D, E, F, 20S, 30S, 200, 300, 310 and 320 models of the AS/400 with V3R1 Operating System. The 7208 model 222 is intended for system operations that require saving large amounts of data, unattended save/restore, and 8-mm tape interchange with other AS/400 systems. It has an instantaneous data transfer rate of 500KB per second. The 7208 model 222 features data compression hardware using an adaptation of IBM's IDRC algorithm which provides an effective capacity of up to 14GB of data per cartridge and an increased effective data rate of 1MB per second depending on the type of data being transferred. Alternate IPL is supported on all models except the 9402 Models D04 and D06, and the 9404 Models D10 and D20.

Physical Specifications

- Width: 250 mm (9.84 inches)
- Depth: 275 mm (10.83 inches)
- Height: 60 mm (2.36 inches)
- Weight: 3.89 kg (8.57 pounds)

Operating Environment

- Temperature: 16 to 32C (60 to 90F)
- Relative Humidity: 20 to 80 percent
- Wet Bulb: 23.0C (73F) maximum
- Electrical power: 0.2 KVA
- Thermal output: 225 BTUs/hour maximum
- Noise Level: 46 dBA (5.8 bels) operating, 43 dBA (5.5 bels) idle
- U.S.A. FCC Class: A
- Japan VCCI: 1

- Germany VDE Class: A
- CISPR-22 Class: A

Limitations

160-meter data cartridges written on the 7208-222 cannot be read or written on 7208 models 002, 012, or 232. Tapes written on 7208 models 002, 012, and 232 can be read and written by the 7208-222 which provides full interchange of data between all 7208 models.

Hardware Requirements

The 7208 Model 222 can be attached to all D, E, F, 20S, 30S, 200, 300, 310, and 320 Models of the AS/400 with V3R1 Operating System with the exception of D02 and E02. The 7208 Model 222 is attached directly to the AS/400 via a Removable Media Device Attachment (#2621) feature. Up to two model 222s can be attached per #2621.

The 7208 can also attach to the AS/400 Magnetic Media Controller (#6534) or the PCI Magnetic Media Controller (#2729) with cable features 9147, 9182, or 9183 (or MES features 2871, 2903, or 2904). Each tape drive must be separately attached as each adapter has only one port.

Software Requirements

Support for the 7208-222 will be provided by OS/400 Version 3 Release 1.

Publications

The following publications are shipped with the product. Additional copies will be available by November, 1994.

Title	Order Number	Part Number
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English Pub Group		87G4814
- Installation Guide	SA26-7116	87G4816
- Operator Guide	SA26-7117	87G4817
- Service Guide	SA26-7118	87G4818
- Safety Information Manual	SA26-7003	55F9468

Features -- Specify/Special/Exchange

No Charge Specify Codes

No Charge Color Specify Codes (initial order only)

(initial plant order only)	Description
9100	Black exterior covers
9200	White exterior covers

SCSI CABLE SPECIFY CODES (Initial Plant Order or MES)

initial plant order only	IPO/ MES	Description
9834 cable	3234	4 meter (13.1 feet) System to device
9836 cable	3236	12 meter (39.3 feet) System to device
9846 cable	3246	20 meter (65.6 feet) System to device

The following SCSI cable features are to be used for attachment to AS/400 IOP features #6534 or #2729:

SPECIFY CODE (IPO)	SPECIFY MES ONLY	DESCRIPTION
9147	2871	1.5 meter (5 foot) cable
9182	2903	4 meter (13 foot) cable
9183	2904	12 meter (39 foot) cable

PUBLICATIONS SPECIFY CODE

Specify code	Country
9300	U.S. English
9703	French
9704	German
9707	Brazilian/Portuguese
9708	Spanish
9711	Italian
9712	Canadian/French
9714	Japanese

POWER CORD (initial order only)

Specify code	Description
9800	9 foot (2.7M) power cord, 125V, 15A US/Canada
9986	6 foot (1.8M) power cord, 125V, 15A US/Canada
9080	9 foot (2.7M) Watertight power, 125V, 15A US/Canada

9986/9080	6 foot (1.8M)	Watertight power, 125V, 15A	US/Canada
9830	9 foot (2.7M)	power cord, 250V, 10 16A	Italy
9825	9 foot (2.7M)	power cord, 250V, 13A	United Kingdom
9821	9 foot (2.7M)	power cord, 250V, 11A	Denmark
9820	9 foot (2.7M)	power cord, 250V, 16A (AC)	France
9827	9 foot (2.7M)	power cord, 250V, 6-16A	Israel
9828	9 foot (2.7M)	power cord, 255V, 10A	
Switzerland			
9829	9 foot (2.7M)	power cord, 250V, 16A	South Africa
Africa			
9831	9 foot (2.7M)	power cord, 250V, 10A	Australia
9833	9 foot (2.7M)	power cord, 250V, 15A	US/Canada

SPECIFY CODE

ORDERING COUNTRY		OPTION	
C/C	COUNTRY	GROUP	CODE
----	-----	-----	-----
DOM	United States	DOM	9800
613	Argentina	IBM LA	9831
619	Bahamas	IBM LA	9800
621	Barbados	IBM LA	9800
627	Bermuda	IBM LA	9800
629	Bolivia	IBM LA	9800
631	Brazil	IBM LA	9800
649	Canada	IBM LA	9800
647	Cayman Islands	IBM LA	9800
655	Chile	IBM LA	9830
661	Colombia	IBM LA	9800
663	Costa Rica	IBM LA	9800
681	Dominican Republic	IBM LA	9800
829	El Salvador	IBM LA	9800
683	Ecuador	IBM LA	9800
731	Guatemala	IBM LA	9800
640	Guyana	IBM LA	9800
733	Haiti	IBM LA	9800
735	Honduras	IBM LA	9800
759	Jamaica	IBM LA	9800
781	Mexico	IBM LA	9800
799	Nicaragua	IBM LA	9800
791	Netherlands Antilles	IBM LA	9820
811	Panama	IBM LA	9800
813	Paraguay	IBM LA	9820
815	Peru	IBM LA	9800
843	Surinam	IBM LA	9800
859	Trinidad	IBM LA	9800
869	Uruguay	IBM LA	9834
871	Venezuela	IBM LA	9800
616	Australia	AP	9831
615	Bangladesh	AP	9829
643	Brunei	AP	9825
651	China Mainland	AP	9820
672	Peoples Rep. Of China	AP	9825
699	Fiji	AP	9825
732	Guinea	AP	9820
738	Hong Kong	AP	9825
744	India	AP	9825
749	Indonesia	AP	9820

760	Japan	AP	9800
761	Japan (PDS)	AP	9800
766	Korea	AP	9800
738	Macau	AP	9825
778	Malaysia	AP	9825
646	Myanmar (Burma)	AP	9829
796	New Zealand	AP	9831
818	Philippines	AP	9800
834	Singapore	AP	9825
652	Sri Lanka	AP	9829
858	Taiwan	AP	9800
856	Thailand	AP	9833

ORDERING COUNTRY

OPTION
SPECIFY CODE

C/C	COUNTRY	GROUP	CODE
-----	-----	-----	-----
852	Vietnam	AP	9800
610	Angola	EMEA	9820
612	Algeria	EMEA	9820
618	Austria	EMEA	9820
620	Bahrain (NE0)	EMEA	9825
624	Belgium	EMEA	9820
699	Bosnia	EMEA	9820
	Botswana	EMEA	9820

ORDERING COUNTRY

OPTION
SPECIFY CODE

C/C	COUNTRY	GROUP	CODE
-----	-----	-----	-----
644	Bulgaria	EMEA	9820
650	Cameroon	EMEA	9820
654	Central Africa Rep	EMEA	9820
656	Chad	EMEA	9820
668	Czech Republic	EMEA	9820
664	Congo	EMEA	9820
704	Croatia	EMEA	9820
666	Cyprus	EMEA	9825
678	Denmark	EMEA	9821
865	Egypt	EMEA	9820
698	Ethiopia	EMEA	9830
702	Finland	EMEA	9820
706	France	EMEA	9820
682	German Dem. Rep. East	EMEA	9820
724	Germany, West	EMEA	9820
723	Germany, West (PDS)	EMEA	9820
725	Ghana	EMEA	9825
726	Greece	EMEA	9820
740	Hungary	EMEA	9820
742	Iceland	EMEA	9820
752	Iraq	EMEA	9825
750	Iran	EMEA	9820
754	Ireland	EMEA	9825
756	Israel	EMEA	9827
758	Italy	EMEA	9830
757	Ivory Coast	EMEA	9820
762	Jordan	EMEA	9825
764	Kenya	EMEA	9825
767	Kuwait	EMEA	9825

768	Lebanon	EMEA	9820
770	Liberia	EMEA	9820
772	Libya	EMEA	9830
773	Luxembourg	EMEA	9820
705	Macedonia	EMEA	9820
774	Malagasy Republic (Madagascar)	EMEA	9820
769	Malawi	EMEA	9825
ORDERING COUNTRY			OPTION
			SPECIFY CODE
C/C	COUNTRY	GROUP	CODE
-----	-----	-----	-----
776	Mali	EMEA	9820
780	Malta	EMEA	9830
782	Mauritius	EMEA	9820
783	Mauritania	EMEA	9820
784	Morocco	EMEA	9820
786	Mozambique	EMEA	9820
790	Nepal	EMEA	9830
788	Netherlands	EMEA	9820
803	Niger	EMEA	9820
802	Nigeria	EMEA	9825
806	Norway	EMEA	9820
805	Oman (Sult)	EMEA	9825
808	Pakistan	EMEA	9829
820	Poland	EMEA	9820
822	Portugal	EMEA	9820
823	Qatar	EMEA	9825
826	Romania	EMEA	9820
832	Saudi Arabia	EMEA	9800
824	Senegal	EMEA	9820
707	Serbia	EMEA	9820
833	Sierra Leone	EMEA	9830
708	Slovenia	EMEA	9820
835	Somalia	EMEA	9830
864	South Africa	EMEA	9829
838	Spain	EMEA	9820
842	Sudan	EMEA	9820
846	Sweden	EMEA	9820
848	Switzerland	EMEA	9828
850	Syria Arab Republic	EMEA	9820
851	Tanzania	EMEA	9825
840	Tunisia	EMEA	9820
862	Turkey	EMEA	9820
857	Uganda	EMEA	9825
853	Upper Volta	EMEA	9820
821	U.S.S.R	EMEA	9820
680	United Arab Emirates	EMEA	9825
866	United Kingdom	EMEA	9825
662	Zaire	EMEA	9820
825	Zimbabwe	EMEA	9820
883	Zambia	EMEA	9825
806	Norway	EMEA	9820

Note: Chicago Twist Lock, Code 9986

Special Feature Codes -- Chargeable

The following SCSI cables can be ordered as additional cables with the initial plant order or via an MES.

- #2871 for a 1.5 meter (5 foot) SCSI cable for attachment to AS/400 IOP features #6534 or #2729
- #2903 for a 4 meter (13 foot) SCSI cable for attachment to AS/400 IOP features #6534 or #2729
- #2904 for a 12 meter (39 foot) SCSI cable for attachment to AS/400 IOP features #6534 or #2729

Maximum: None. Field Installable Only.

Feature Exchanges

None.

Accessories

None.

Customer Replacement Parts

None.

Machine Elements

None.

Supplies

The part numbers for additional supplies are:

Supply Item	Part Number
One 8mm 160 meter 7GB Data Cartridge	87G1601
One 8mm 112 meter 5GB Data Cartridge	21F8575
One 8mm Cleaning Cartridge	16G8467

For additional media supplies refer to:

- <http://www.storage.ibm.com/media>

or contact the appropriate distributor for your location as given below:

To purchase IBM-branded media and media supplies, call 1-888-IBM- MEDIA in the U.S. and Canada, or go to:

- <http://www.storage.ibm.com/media>

Diskettes

None.

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