IBM System Storage DCS9900 Storage System delivers 1200 terabytes storage capacity for Deep Computing systems, IBM System p High Performance Computing, and IBM System x Linux Cluster systems

Table of contents

At a glance

The IBM® System Storage™ DCS9900 Storage System offers a scalable storage solution for Deep Computing systems, IBM System p® High Performance Computing (HPC) systems, broadcast video applications, and IBM System x™ e1350 Linux® Cluster systems.

DCS9900 Storage System highlights:

- DCS9900 Storage System initial offering consists of the DCS9900 Controller Model CP2 and the DCS9900 3S1 SAS/SATA Storage Expansion Unit.
- DCS9900 Controller supports Fibre Channel connectivity.
- A DCS9900 Controller can attach up to 20 DCS9900 3S1 Expansion Units scaling up to 1200 disks, yielding up to 1200 TB physical storage capacity.
- The DCS9900 can provide a sustained 6 gigabytes-per-second data streaming bandwidth.

For ordering, contact your IBM representative, an IBM Business Partner, or IBM Americas Call Centers at 800-IBM-CALL (Reference: YE001).

Overview

The IBM System Storage DCS9900 Controller Model CP2 (1269-CP2), supporting Fibre Channel connectivity, is a follow-on storage product to the System Storage DCS9550 Fibre Channel (FC) Couplet Controller. The DCS9900 Controller Model CP2 represents an eighth generation storage solution architecture.

The DCS9900 Storage System is designed to meet the storage needs of highly scalable, data streaming applications served by Deep Computing systems, System P High Performance Computing (HPC) systems, broadcast video, and System x 1350™ Linux Cluster systems.

The DCS9900 Storage System initial offering consists of the DCS9900 Controller Model CP2 and the DCS9900 3S1 SAS/SATA Storage Expansion Unit. The DCS9900 Controller Model CP2 attaches to the DCS9900 Storage Expansion Units using twenty 3 Gbps SAS v1.0 disk expansion ports and is designed to scale up to 1200 disks, providing up to 1200 terabytes (TB) storage capacity in one DCS9900 controller system.

The DCS9900 Storage System consolidates and fully integrates a parallel, non-blocking architecture which enables industry leading data streaming performance. The DCS9900 is designed to provide optimal block level and file system performance with up to 6 gigabytes-per-second sustained data streaming bandwidth delivered to deep computing applications, including

- IBM Blue Gene® computing solutions
- Genome medical research
- Highly scalable rich media applications
- Broadcast video applications
- Government research

Key prerequisites

The System Storage DCS9900 Storage System is attachable to the following host systems:

- Blue Gene and Deep Computing
- IBM System p High Performance Computing (HPC) systems
- Broadcast video applications
- IBM System x 1350 Linux Cluster

Mandatory RPQ 8S0870 required:

All orders for the DCS9900 Storage System, which includes the DCS9900 Controller Model CP2 and the DCS9900 Storage Expansion Units, must first be approved by ordering mandatory I-listed RPQ 8S0870. Ask your IBM representative how to order the I-listed RPQ. Refer to the Limitations section for details.

Planned availability date

October 24, 2008

Description

The IBM System Storage DCS9900 Storage System initial offering consists of the DCS9900 Controller Model CP2 (1269-CP2) and the DCS9900 3S1 SAS/SATA Storage Expansion Unit (1269-3S1).

The DCS9900 Model CP2 controller supports Fibre Channel host connectivity and can attach up to 20 DCS9900 3S1 SAS/SATA Storage Expansion Units to build storage configurations that can range from 150 to 1200 disks and scale from 21.9 to 1200 TB physical storage capacity.

DCS9900 Controller Model CP2

The DCS9900 Controller Model CP2 (1269-CP2) comes in a 4U rack-mount enclosure containing dual controllers with 5 GB cache (2.5 GB cache per controller) and eight 8 Gbps Fibre Channel host ports. The DCS9900 controller attaches to DCS9900 3S1 SAS/SATA Storage Expansion Units using 3 Gbps SAS v1.0 disk expansion ports. The DCS9900 Model CP2 controller can support up to 1200 disks, yielding up to 1200 TB physical storage capacity, 64 thousand LUNs, and up to 4096 direct host logins per DCS9900 system.

The DCS9900 controller is designed to support managed Quality of Service to provide uninterrupted data delivery, as well as source all of its performance from multiple target LUNs or a single target "PowerLUN," reducing the need for host-based striping software.

The DCS9900 controller incorporates enterprise-class data protection with on-the-fly parity checking on all read I/Os, as well as hardware-enabled RAID 6, which protects data in the event of double disk failure in the same redundancy group, without adversely affecting data availability or system performance.

Additionally, the DCS9900 includes block level virtualization, to virtualize storage deployment and system management, through LUN aliasing, WWN masking/filtering, or port zoning.

The DCS9900 Controller Model CP2 attaches to DCS9900 Storage Expansion Units to form the following supported, orderable configurations:

- One DCS9900 Model CP2 Controller attached to five DCS9900 3S1 SAS/SATA Storage Expansion Units
  - Range from 150 to 300 disk drives (in increments of 10 disk drives)
  - Scales from 21.9 to 300 TB physical storage capacity
- One DCS9900 Model CP2 Controller attached to 10 DCS9900 3S1 SAS/SATA Storage Expansion Units
  - Range from 150 to 600 disk drives (in increments of 10 disk drives)
  - Scales from 21.9 to 600 TB physical storage capacity
- One DCS9900 Model CP2 Controller attached to 20 DCS9900 3S1 SAS/SATA Storage Expansion Units
  - Range from 600 to 1200 disk drives (in increments of 10 disk drives)
  - Scales from 87.6 to 1200 TB physical storage capacity

Each DCS9900 Storage System must be ordered with the minimum of number of disk drives, and then can be incremented an additional ten drives at a time, applied to the overall DCS9900 system configuration.

DCS9900 3S1 SAS/SATA Storage Expansion Unit (1269-3S1)

The DCS9900 3S1 SAS/SATA Storage Expansion Unit comes in a 4U, rack-mounted, 60 SAS or 60 SATA disk enclosure. The Model 3S1 internally accommodates up to 60 SAS or 60 SATA disk drives logically configured as a 1x60 or 2x30 connection to the DCS9900 Model CP2 controller, dependent upon whether the configuration will contain five 3S1 expansion units or ten/twenty 3S1 expansion units. The Model 3S1 includes hot-swappable power supplies and hot-swappable cooling fans.

The Model 3S1 disk expansion unit integrates into a 45U 1050mm deep rack, rack feature (#2003). A single DCS9900 system can consist of a configuration made up of either one or two racks. The first rack can contain either five 3S1 expansion units or ten 3S1 expansion units. The second rack must contain ten 3S1 expansion units for a maximum configuration of up to twenty 3S1 expansion units and up to 1200 disk drives.

An order for a configuration made up of five 3S1 disk expansion units must be ordered with a minimum of 150 disk drives (30 drives per 3S1 expansion unit), and scales in increments of ten up to a maximum of 300 disk drives (60 drives per 3S1 expansion unit).

Each group of five 3S1 disk expansion units ordered must contain the same number and same type of disk drives and ordered in increments of ten drives applied across the entire configuration. For example, each of the five 3S1 expansion units in the rack may contain either 30-, 32-, 34-, 36-,.....54-, 56-, 58-, up to 60-disk drives. But all 3S1 expansion units must contain the same number and type of drives.

Additionally, when field upgrading from five 3S1 expansion units to ten 3S1 expansion units, specify feature 9231, the resulting rack of ten 3S1 expansion units must contain the same number and type of disk drives in each expansion unit.

An order for a configuration made up of ten 3S1 disk expansion units must be ordered with a minimum of 150 disk drives (15 drives per 3S1 expansion unit), and scales in increments of ten drives up to a maximum of 600 drives (60 disk drives per 3S1 enclosure).

Each group of ten 3S1 disk expansion units ordered must contain the same number and type of disk drives and ordered in increments of ten drives applied across the entire configuration. For example, each of the ten 3S1 expansion units in the rack may contain either 15-, 16-, 17-, 18-,.....57-, 58-, 59-, up to 60-disk drives. But all expansion units must contain the same number and type of drives.

A configuration made up of two racks of ten 3S1 expansion units attached to a DCS9900 controller can have a different disk drive feature in each rack. Therefore, disk drive features must not intermixed within each rack of five 3S1s or each rack of ten 3S1s, however, configurations

made up of two rack of ten 3S1 expansion units can have a different SAS or SATA disk drive feature in each rack.

- 500 GB SATA disk drive (#3201)
- 750 GB SATA disk drive (#3202)
- 1000 GB SATA disk drive (#3203)
- 146 GB/15K SAS disk drive (#3231)
- 300 GB/15K SAS disk drive (#3232)
- 450 GB/15K SAS disk drive (#3233)

Every DCS9900 system location which has a DCS9900 system configuration that uses the 45U 1050mm deep Rack Unit (#2003), must have access to one Service Ladder (#2011). The Service Ladder is mandatory for installation, service, and maintenance of components within the upper drawers of the 45U 1050mm deep Rack Unit. Failure to have at least one Service Ladder available in a required location could result in delayed or prolonged maintenance times.

Refer to the Limitations section for additional information on the Service Ladder requirements.

Orderable configurations of the IBM System Storage DCS9900 Storage System

The orderable configurations are determined by specify features (#9221 - #9232).

- Specify feature (#9221) - One DCS9900 controller attached to five DCS9900 3S1 SAS/SATA Storage Expansion Units assembled in one 45U rack.
- Specify feature (#9222) - One DCS9900 controller attached to 10 DCS9900 3S1 SAS/SATA Storage Expansion Units assembled in one 45U rack.
- Specify feature (#9223) - One DCS9550 controller attached to 20 DCS9900 3S1 SAS/SATA Storage Expansion Units assembled two 45U racks.
- Specify feature (#9231) - Field Upgrade to 10 Model 3S1s: Addition of five DCS9900 3S1 SAS/SATA Storage Expansion Units for field installation into an existing 45U rack.
- Specify feature (#9232) - Field Upgrade to 20 Model 3S1s: 10 DCS9900 3S1 SAS/SATA Storage Expansion Units assembled in a 45U rack.

Accessibility by people with disabilities

You can request a U.S. Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance at

http://www-03.ibm.com/able/product_accessibility/index.html

Product number

Description	Machine type	Model	Feature number
DCS9900 Controller Mod CP2 (Dual controller w/eight host ports, and 20 SAS disk expansion ports)	1269	CP2	
DCS9900 3S1 Expansion Unit (1x60 or 2x30 SAS/SATA disk expansion unit)	1269	3S1	
45U 1050mm deep Rack Unit	1269	CP2	2003
Service Ladder	1269	CP2	2011
60-Dsk/Ch Interconnect Kit	1269	CP2	2014
Cabling Accessory Kit	1269	CP2	2016

60-Dsk/Ch Da.Chain/Blt Kit	1269	CP2	2024
Eight 8 Gbps FC Host Ports	1269	CP2	2211
500 GB SATA Disk Drive	1269	3S1	3201
750 GB SATA Disk Drive	1269	3S1	3202
1000 GB SATA Disk Drive	1269	3S1	3203
146 GB/15K SAS Disk Drive	1269	3S1	3231
300 GB/15K SAS Disk Drive	1269	3S1	3232
450 GB/15K SAS Disk Drive	1269	3S1	3233
DCS9900 Two Host Port Act.	1269	CP2	4112
DCS9900 Ten Tier Capacity	1269	CP2	4114
DCS9900 GUI Interface	1269	CP2	4116
IPO-Mod CP2 w/5 Mod 3S1	1269	CP2	9221
IPO-Mod CP2 w/10 Mod 3S1	1269	CP2	9222
IPO-Mod CP2 w/20 Mod 3S1	1269	CP2	9223
Fld Upgde to 10 Mod 3S1	1269	CP2	9231
Fld Upgde to 20 Mod 3S1	1269	CP2	9232
PDUs w/NEMA Pwr Cords/U.S.	1269	CP2	9852
PDUs w/IEC Pwr Cords/EU	1269	CP2	9853

Publications

Hardcopy publications and support documentation on CD-ROM are included with the orderable configurations.

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For details on education offerings related to specific products, visit

http://www.ibm.com/services/learning/index.html

Select your country, and then select the product as the category.

Technical information

Specified operating environment

Physical specifications

DCS9900 Controller (1269-CP2)

```
Width:  432 mm (17.0 in)
Depth:  635 mm (25.0 in)
Height: 178 mm (7.0 in) Note: Each controller height is 89 mm (3.5 in)
Weight: 36.4 kg (80 lb) Note: Each controller weighs 18.2 kg (40 lb)
```

DCS9900 3S1 SAS/SATA Storage Expansion Unit (1269-3S1)

```
Width:  446 mm (17.56 in)
Depth:  914 mm (36.0 in)
Height: 177 mm (6.97 in)
Weight: 54.5 kg (120.0 lb) empty enclosure
Weight: 109 kg (240.0 lb) weight with 60 disk drives
```

Operating environment

DCS9900 Controller Model CP2 (1269-CP2)

```
Temperature Operating Environment: 5 to 35 degrees C
Operational Derating: Derate ambient temperature by 1 degree C
for every 1000 feet (304.8 meters) increase above sea level
Relative humidity:  20% to 80%
Electrical Power:
- Voltage range: 100-120/200-240 V ac
- Operating current: 0.9 - 2.75 amperes
- AC power/maximum current:  11.0 amperes @100 V ac,
  5.5 amperes @200 V ac (each controller - 5.5 amperes @100 V ac,
  2.75 amperes @200 V ac)
- AC power/average current:  4.0 amperes @110 V ac,
  2.1 amperes @208 V ac
- Power: 550 watts, typical
- Frequency: 47-63 Hz
Capacity of exhaust: 89 cfm
Cooling: Thermal rating 1880 BTU/hr
Noise level: Acoustic Declared Sound Power Level 7.0 bels
```

Note: The specified operating environment of the DCS9900 Storage System is different from the DCS9550 Storage System in regards to weight, power consumption, acoustics, and thermals. Refer to the Limitations section for additional details.

DCS9900 3S1 SAS/SATA Storage Expansion Unit (1269-3S1)

```
Temperature/Temperature range: (operating)  5 to 32 degrees C
Operational Derating: Derate ambient temperature by 1 degree C
for every 1000 feet (304.8 meters) increase above sea level
Relative humidity:  20% to 80%
Electrical Power:
- Voltage range: 190-240 V ac, 5.0 amperes maximum per input
  Note: This product is not specified for operation below 190 V ac
- Operating current: 8-11 amperes total
- Power:  1200 watts typical with 60 disk drives
- Frequency: 50-60 Hz
Capacity of exhaust: 200 cfm
Cooling: 4100 BTU/hour
Noise level: Acoustic Declared Sound Power with SATA drives 7.4 bels
Noise level: Acoustic Declared Sound Power with SAS drives 8.2 bels
```

Note: Two DCS9900 configuration that use the 3S1 Storage Expansion Units exceed IBM's recommended criteria for acceptable noise levels. Refer to the Limitations section for additional details.

Limitations

All orders for the DCS9900 Storage System, which includes the DCS9900 Controller Model CP2 (1269-CP2) and DCS9900 3S1 SAS/SATA Storage Expansion Unit (1269-3S1), must first be approved by ordering mandatory I-listed RPQ 8S0870. Refer to your IBM representative to order the I-listed RPQ.

Every DCS9900 system location which has a DCS9900 system configuration that uses the 45U 1050mm deep Rack Unit (#2003), must have access to one Service Ladder (#2011). The Service Ladder is mandatory for installation, service, and maintenance of components within the upper drawers of the 45U 1050mm deep Rack Unit. Failure to have at least one Service Ladder available in a required location could result in delayed or prolonged maintenance times.

The following two DCS9900 system configurations which use the 3S1 Storage Expansion Units exceed IBM's recommended criteria for acceptable noise levels.

- DCS9900 configuration with Specify feature (#9221)
  - One DCS9900 Model CP2 controller with five Model 3S1 SAS/SATA Expansion Units installed in a 45U rack.
- DCS9900 configuration with Specify feature (#9222)
  - One DCS9900 Model CP2 controller with ten Model 3S1 SAS/SATA Expansion Units installed in a 45U rack.

For detailed measurement data, refer to the DCS9900 Noise Declaration document included in the RPQ package for DCS9900 configurations that utilize the 3S1 Storage Expansion Unit. The DCS9900 Noise Declaration document is also available by visiting

http://www.datadirectnet.com/dcs9900/

Notice: Government regulations (such as those prescribed by OSHA or European Community Directives) may govern noise level exposure in the workplace and may apply to you and your DCS9900 Storage System installation. The actual sound pressure levels in your installation depend upon a variety of factors, including the number of racks in the installation; the size, materials, and configuration of the room; the noise levels from other equipment; the room ambient temperature, and employees' location in relation to the equipment. Further, compliance with such government regulations also depends upon a variety of additional factors, including the duration of employees' exposure and whether employees wear hearing protection. IBM recommends that you consult with qualified experts in this field to determine whether you are in compliance with the applicable regulations.

DCS9550 system customers contemplating the purchase and installation of a DCS9900 system should review the Operating Environment Specifications section for the DCS9900 system in this announcement. The operating environment for the DCS9900 is different from the DCS9550, regarding weight, power consumption, acoustics, and thermals.

Planning information

You are responsible for downloading or obtaining from IBM, and installing designated Machine Code (microcode, basic input/output system code (called "BIOS"), utility programs, device drivers, and diagnostics delivered with an IBM machine) and other software updates in a timely manner from an IBM Internet Web site or from other electronic media, and following the instructions that IBM provides. You may request IBM to install Machine Code changes; however, you may be charged for that service.

Cable orders

All required cables necessary to attach the DCS9550 Storage System to servers are determined as part of the prerequisite mandatory RPQ.

Security, auditability, and control

This product uses the security and auditability features of the host and application software.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

Terms and conditions

IBM Global Financing

Yes

Warranty period

One year

Warranty service

If required, IBM provides repair or exchange service depending on the types of warranty service specified for the machine. IBM will attempt to resolve your problem over the telephone, or electronically via an IBM Web site. You must follow the problem determination and resolution procedures that IBM specifies. Scheduling of service will depend upon the time of your call and is subject to parts availability.

Service levels are response time objectives and are not guaranteed. The specified level of warranty service may not be available in all worldwide locations. Additional charges may apply outside IBM's normal service area. Contact your local IBM representative or your reseller for country- and location-specific information. This product is covered by the following type of service.

On-site Service: IBM will repair the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM machine. The area must be clean, well lit, and suitable for the purpose.

- 24 hours per day, 7 days a week, same-day response

Warranty service upgrades

During the warranty period, warranty service upgrades provide an enhanced level of On-site Service for an additional charge. A warranty service upgrade must be purchased during the warranty period and is for a fixed term (duration). It is not refundable or transferable and may not be prorated. If required, IBM will provide the warranty service upgrade enhanced level of On-site Service acquired by the customer. Service levels are response time objectives and are not guaranteed.

IBM will attempt to resolve your problem over the telephone or electronically by access to an IBM Web site. You must follow the problem determination and resolution procedures that IBM specifies. Scheduling of service will depend upon the time of your call and is subject to parts availability.

On-site Service: IBM will repair the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM machine. The area must be clean, well lit, and suitable for the purpose. The following service selections are available as warranty upgrades for your machine.

- 24 hours per day, 7 days a week, 2-hour average response

Maintenance Services:

If required, IBM provides repair or exchange service depending on the types of maintenance service specified for the Machine. IBM will attempt to resolve your problem over the telephone or electronically, via an IBM Web site. You must follow the problem determination and resolution procedures that IBM specifies. Scheduling of service will depend upon the time of your call and is subject to parts availability. Service levels are response time objectives and are not guaranteed. The specified level of maintenance service may not be available in all worldwide locations. Additional charges may apply outside IBM's normal service area. Contact your local

IBM representative or your reseller for country- and location-specific information. The following service selections are available as maintenance options for your machine type.

On-site Service: IBM will repair the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the IBM Machine. The area must be clean, well lit, and suitable for the purpose.

- 9 hours per day, Monday through Friday, excluding holidays, next-business-day response
- 9 hours per day, Monday through Friday, excluding holidays, 4-hour average response
- 24 hours per day, 7 days a week, 4-hour average response
- 24 hours per day, 7 days a week, 2-hour average response

Usage plan machine

No

IBM hourly service rate classification

Three

When a type of service involves the exchange of a machine part, the replacement may not be new, but will be in good working order.

Field-installable features

Yes

Model conversions

No

Machine installation

Installation is performed by IBM. IBM will install the machine in accordance with the IBM installation procedures for the machine. In the United States, contact IBM at 1-800-IBM-SERV (426-7378). Outside the U.S., contact the local IBM office.

Graduated program license charges apply

No

Licensed internal code and licensed machine code

These products do not contain Licensed Internal Code or Licensed Machine Code.

Educational allowance

A reduced charge is available to qualified education customers. The educational allowance may not be added to any other discount or allowance.

The educational allowance is 15% for the products in this announcement.

Pricing

Prices are available upon request.

Description	Machine type	Model	Feature number
DCS9900 Controller Mod CP2	1269	CP2	

(Dual controller w/eight host ports, and 20 SAS disk expansion ports)			
DCS9900 3S1 Expansion Unit (1x60 or 2x30 SAS/SATA disk expansion unit)	1269	3S1	
45U 1050mm deep Rack Unit	1269	CP2	2003
Service Ladder	1269	CP2	2011
60-Dsk/Ch Interconnect Kit	1269	CP2	2014
Cabling Accessory Kit	1269	CP2	2016
60-Dsk/Ch Da.Chain/Blt Kit	1269	CP2	2024
Eight 8 Gbps FC Host Ports	1269	CP2	2211
500 GB SATA Disk Drive	1269	3S1	3201
750 GB SATA Disk Drive	1269	3S1	3202
1000 GB SATA Disk Drive	1269	3S1	3203
146 GB/15K SAS Disk Drive	1269	3S1	3231
300 GB/15K SAS Disk Drive	1269	3S1	3232
450 GB/15K SAS Disk Drive	1269	3S1	3233
DCS9900 Two Host Port Act.	1269	CP2	4112
DCS9900 Ten Tier Capacity	1269	CP2	4114
DCS9900 GUI Activation	1269	CP2	4116
IPO-Mod CP2 w/5 Mod 3S1	1269	CP2	9221
IPO-Mod CP2 w/10 Mod 3S1	1269	CP2	9222
IPO-Mod CP2 w/20 Mod 3S1	1269	CP2	9223
Fld Upgde to 10 Mod 3S1	1269	CP2	9231
Fld Upgde to 20 Mod 3S1	1269	CP2	9232
PDUs w/NEMA Pwr Cords/U.S.	1269	CP2	9852
PDUs w/IEC Pwr Cords/EU	1269	CP2	9853

Description	Mach type	Model	Feature number	Field install only	Plant install only	Cables required
45U Rack Unit	1269	CP2	2003	N	N	N
Service Ladder	1269	CP2	2011	N	N	N
60-Dsk/Ch Interct Kit	1269	CP2	2014	N	Y	N
Cabling Accessory Kit	1269	CP2	2016	Y	N	N
60-Dsk Da.Chain/Blt	1269	CP2	2024	N	N	N
Eight 8Gbps Host pts	1269	CP2	2211	N	Y	N
500 GB SATA Disk	1269	3S1	3201	N	N	N
750 GB SATA Disk	1269	3S1	3202	N	N	N
1000 GB SATA Disk	1269	3S1	3203	N	N	N
146 GB/15K SAS Disk	1269	3S1	3231	N	N	N
300 GB/15K SAS Disk	1269	3S1	3232	N	N	N

450 GB/15K SAS Disk	1269	3S1	3233	N	N	N
DCS9900 Two Host Pts	1269	CP2	4112	N	N	N
DCS9900 Ten Tier Act	1269	CP2	4114	N	N	N
DCS9900 GUI Act.	1269	CP2	4116	N	N	N
IPO-CP2 w/5 Mod 3S1	1269	CP2	9221	N	Y	N
IPO-CP2 w/10 Mod 3S1	1269	CP2	9222	N	Y	N
IPO-CP2 w/20 Mod 3S1	1269	CP2	9223	N	Y	N
Fld Upgde to 10/3S1	1269	CP2	9231	Y	N	N
Fld Upgde to 20/3S1	1269	CP2	9232	Y	N	N
PDUs w/NEMA Pwr Cds	1269	CP2	9852	N	N	N
PDUs w/IEC Pwr Cds	1269	CP2	9853	N	N	N

Y = Yes
N = No

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