

CH221 V5 Configuration Help

1. The type of Blade

Low power consumption CPU is power consumption in the 165W and below the CPU;
High Power CPU: Intel Xeon Gold 6154 (200W) / Intel Xeon Platinum 8168 (205W) /
Intel Xeon Platinum 8180 (205W).

2. ===Memory===

o 2.1 DIMM type

1. The following is not supported:
Mixing of RDIMMs and LRDIMMs;
Mixing of different DIMM capacity;
2. 16GB Memory optimal cost;
3. Memory nominal frequency is only for reference, the actual performance frequency limits by the board design and intel platform, may inquire from the intel Snapshot specification table.

o 2.2 Number of DIMMs

1. The CH121 V5 Blade Server one CPU supports 1 to 12 DIMMs, and two CPUs support 1 to 24 DIMMs, Blade Server support for up to 24 DIMMs;
2. The CH242 V5 Blade Server four CPUs supports 1 to 48 DIMMs, Blade Server support for up to 48 DIMMs;
3. The CH225 V5 dual CPU supports 1-24 memory sticks, and the blade supports up to 24 memories;
4. The CH221 V5 Blade Server one CPU supports 1 to 12 DIMMs, dual CPU supports 1-24 memory sticks, and the blade supports up to 24 memories.

3. ===2.5" Hard Disk===

o 3.1 Number of the 1st HDDs

1. The CH121 V5 single blade server support for up to 2 x 2.5" HDD;
2. The CH242 V5 single blade server support for up to 4 x 2.5" HDD;
3. The CH225 V5 single blade server support for up to 12 x 2.5" HDD;
4. The CH221 V5 single blade server support for up to 2 x 2.5" HDD.

o 3.2 Number of the 2nd HDDs

1. The CH121 V5 single blade server support for up to 2 x 2.5" HDD;
2. The CH242 V5 single blade server support for up to 4 x 2.5" HDD;

3. The CH225 V5 single blade server support for up to 12 x 2.5" HDD;
4. The CH221 V5 single blade server support for up to 2 x 2.5" HDD.

4. **===2.5" System HDD===**

○ 4.1 **Number of the system HDDs**

The CH225 V5 single blade server support for up to 2 x 2.5" HDD or 4 x 2.5" M.2 system HDD.

5. **===RAID Card===**

○ 5.1 **RAID controller card**

1. If the blade is configured SAS/SATA/SSD Disk, you must configure the RAID card, only when you can not configure RAID card without configure disk or a full NVMe disk;
2. After configuring the RU130(3008)Raid card or super capacitor, you can not configure the half-height half-length PCIe card at the same time.

6. **===Mezz Card===**

○ 6.1 **Mezz card in the MEZZ1 slot**

1. The MEZZ1/3 connected to the 1st group Switch Module (2X/3X) through the backplane;
2. When deployed 1 pcs MZ111 Mezz Card, you need to deployed 1-2 pcs CX110 or CX116 switch modules;
3. When deployed 1 pcs MZ220 Mezz Card(When used with a CPU that consumes more than 165W, the PCIe card can not be configured), you need to deployed 1-2 pcs CX220 switch modules;
4. When deployed 1 pcs MZ310 or MZ312 Mezz Card, you need to deployed 1-2 pcs CX318 or CX320 switch module;
5. When deployed 1 pcs MZ520 or MZ522 Mezz Card, you need to deployed 1-2 pcs CX318,CX320 or CX710 switch module;
6. When deployed 1 pcs MZ710 Mezz Card, you need to deployed 1-2 pcs CX710 or CX920 switch module;
7. If you configure MZ220 or do not select Mezz card, you must use it with the CX916 switch board.

○ 6.2 **Mezz card in the MEZZ2 slot**

1. The MEZZ2/4 connected to the 2nd group Switch Module (1E/4E) through the backplane;
2. When deployed 1 pcs MZ111 Mezz Card, you need to deployed 1-2 pcs CX110 or CX116 switch modules;
3. When deployed 1 pcs MZ220 Mezz Card(When used with a CPU that consumes

more than 165W, the PCIe card can not be configured), you need to deployed 1-2 pcs CX220 switch modules;

4. When deployed 1 pcs MZ310 or MZ312 Mezz Card, you need to deployed 1-2 pcs CX318 or CX320 switch module;

5. When deployed 1 pcs MZ520 or MZ522 Mezz Card, you need to deployed 1-2 pcs CX318,CX320 or CX710 switch module;

6. When deployed 1 pcs MZ611 or MZ612 Mezz Card, you need to deployed 1-2 pcs CX611 switch module;

7. When deployed 1 pcs MZ620 Mezz Card, you need to deployed 1-2 pcs CX620 switch module;

8. When deployed 1 pcs MZ621 Mezz Card, you need to deployed 1-2 pcs CX621 switch module;

9. When deployed 1 pcs MZ710 Mezz Card, you need to deployed 1-2 pcs CX710 or CX920 switch module;

10. When deployed 1 pcs MZ821 Mezz Card, you need to deployed 1-2 pcs CX820 switch module.

○ 6.3 Mezz card in the MEZZ3 slot

1. The MEZZ1/3 connected to the 1st group Switch Module (2X/3X) through the backplane;

2. When deployed 1 pcs MZ111 Mezz Card, you need to deployed 1-2 pcs CX110 or CX116 switch modules;

3. When deployed 1 pcs MZ220 Mezz Card(When used with a CPU that consumes more than 165W, the PCIe card can not be configured), you need to deployed 1-2 pcs CX220 switch modules;

4. When deployed 1 pcs MZ310 or MZ312 Mezz Card, you need to deployed 1-2 pcs CX318 or CX320 switch module;

5. When deployed 1 pcs MZ520 or MZ522 Mezz Card, you need to deployed 1-2 pcs CX318,CX320 or CX710 switch module;

6. When deployed 1 pcs MZ710 Mezz Card, you need to deployed 1-2 pcs CX710 or CX920 switch module.

○ 6.4 Mezz card in the MEZZ4 slot

1. The MEZZ2/4 connected to the 2nd group Switch Module (1E/4E) through the backplane;

2. When deployed 1 pcs MZ111 Mezz Card, you need to deployed 1-2 pcs CX110 or CX116 switch modules;

3. When deployed 1 pcs MZ220 Mezz Card(When used with a CPU that consumes more than 165W, the PCIe card can not be configured), you need to deployed 1-2 pcs CX220 switch modules;

4. When deployed 1 pcs MZ310 or MZ312 Mezz Card, you need to deployed 1-2 pcs CX318 or CX320 switch module;

5. When deployed 1 pcs MZ520 or MZ522 Mezz Card, you need to deployed 1-2 pcs

CX318,CX320 or CX710 switch module;

6. When deployed 1 pcs MZ611/MZ612 Mezz Card, you need to deployed 1-2 pcs CX611 switch module;

7. When deployed 1 pcs MZ620 Mezz Card, you need to deployed 1-2 pcs CX620 switch module;

8. When deployed 1 pcs MZ621 Mezz Card, you need to deployed 1-2 pcs CX621 switch module;

9. When deployed 1 pcs MZ710 Mezz Card, you need to deployed 1-2 pcs CX710 or CX920 switch module;

10. When deployed 1 pcs MZ821 Mezz Card, you need to deployed 1-2 pcs CX820 switch module.

7. **===PCIe Riser Card===**

○ 7.1 **PCIe Riser Card**

1. Used for CH121 V5/CH242 V5/CH221 V5 match parts, configure in the board, provides the PCIe standard card extended function;

2. CH121 V5/CH242 V5/CH221 V5 One Blade with PCIe Riser Card Module supports 1 pcs PCIe Card at most(Support Card Specifications: half-height and half-length slot bits wide, interface supports X16, power is less than 75W);

3. If needs the PCIe card or has the expansion card requirements, please select "Yes"; Otherwise, you can choose "No".

8. **===PCIe Card===**

○ 8.1 **PCIe card in the 1st PCIe slot**

1. Uses with the Blade Board coordination, each Blade Board only configure one kind of model the SSD card or GPU card;

2. CH121 V5/CH242 V5/CH221 V5 single blade server supports 1 pcs this parts with PCIe Transfer Card Module.

○ 8.2 **Perpetual License, NVIDIA GRID Virtual PC, 1 CCU, 1 year product services, Electronic**

Customers choose the GPU When the card needs to use the virtualization function, select this software license:

1. GPU virtualization includes vAPP, vPC, and vWS. The supported vGPU configurations are different. The maximum number of vAPPs, vPCs, and vWS supported by each GPU is different. Please purchase according to the actual situation; virtualizing a vAPP, vPC, or vWS requires a corresponding License.

2. Perpetual License: allows for use of the licensed software indefinitely, The SUMS subscription can renewed at the end of the subscription period; Subscription License: including software license and subscription services, the license will need to be renewed at the end of the subscription period.

3. NVIDIA GRID Virtual PC: for common desktop acceleration, such as PC applications, browsers and HD video; NVIDIA GRID Virtual Workstation: for professional graphics applications to accelerate.
4. A method of counting licenses based on active user VMs. If the VM is active and the NVIDIA GRID software is running, then this counts as one CCU. A GRID CCU is independent of the connection to the VM.
5. Each GPU card can be virtualized 4/8/16/32/64 vGPU. Specific links can help: <https://images.nvidia.com/content/grid/pdf/GRID-Licensing-Guide.pdf>
6. The virtual desktop scenario must be configured license, the number of license configurations depends on the number of concurrent VM. VM (assigned vGPU) will request a license from the license server after startup. When the VM is powered down, the VM will release the license back to the license server (even if the VM does not apply to the license, all the functions of the vGPU can still be used, but VM users will continue to receive warning messages.)

- **8.3 Perpetual License, NVIDIA GRID Virtual PC, 1 CCU, 3 year product services, Electronic**

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<https://images.nvidia.com/content/grid/pdf/GRID-Licensing-Guide.pdf>

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○ **8.6 Subscription License, NVIDIA GRID Virtual PC, 1 CCU, 1 year product services, Electronic**

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○ **8.8 Subscription License, NVIDIA GRID Virtual Workstation, 1 CCU, 1 year product services, Electronic**

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6. The virtual desktop scenario must be configured license, the number of license configurations depends on the number of concurrent VM. VM (assigned vGPU) will request a license from the license server after startup. When the VM is powered down, the VM will release the license back to the license server (even if the VM does

not apply to the license, all the functions of the vGPU can still be used, but VM users will continue to receive warning messages.)

- **8.9 Subscription License, NVIDIA GRID Virtual Workstation, 1 CCU, 3 year product services, Electronic**

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- **8.10 Number of the GPU Cables**

Used to power the GPU card, some GPU cards do not need cables, for details, please refer to the compatibility list

9. ===Insert Part===

- **9.1 Security encryption function**

1. Security chip module, TPM Card, used for system or disk encryption;
2. TPM2.0 support OS: Windows 2012, Windows 2012 R2, Windows 2016, Only supports UEFI mode.

10. ===Operating System===

- **10.1 Operating System type**

Operating system manufacturers provide the original service, Huawei is reseller.

- **10.2 Operating System**

1. The configuration of SuSE Linux OS, Redhat Linux OS licensing is based on cumulative CPU.
2. The configuration of Windows 2016 OS licensing is based on the total number of CPU cores. 1 pcs OS is sufficient if the number of CPU cores is no larger than 16, otherwise additional licenses are indispensable to match the overflow CPU cores.
3. According to the operating system manufacturer's life cycle strategy, entering the version(eg:suse 12.2 of the LTSS cycle requires an additional purchase of LTSS expand maintenance.Please confirm the customer's operating system version before placing the order. If the LTSS version is involved, the customer needs to purchase it from the operating system manufacturer separately.
4. According to the operating system manufacturer's life cycle strategy, entering the version(eg:redhat 7.2) of the EUS/ELS cycle requires an additional purchase of EUS/ELS expand maintenance.Please confirm the customer's operating system version before placing the order. If the EUS/ELS version is involved, the customer needs to purchase it from the operating system manufacturer separately.

- **10.3 Windows Server 2019 Additional 16 Core,English,Standard,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2019-English-Standard-expands the CPU Core License;
2. Each License increases supports 16Core.

- **10.4 Windows Server 2019 Additional 16 Core,Chinese,Standard,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2019-Chinese-Standard-expands the CPU Core License;
2. Each License increases supports 16Core.

- **10.5 Windows Server 2019 Additional 4 Core,English,Standard,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2019-English-Standard-expands the CPU Core License;
2. Each License increases supports 4Core.

- **10.6 Windows Server 2019 Additional 4 Core,Chinese,Standard,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2019-Chinese-Standard-expands the CPU Core License;
2. Each License increases supports 4Core.

- **10.7 Windows Server 2019 Additional 2 Core,English,Standard,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2019-English-Standard-expands the CPU Core License;
2. Each License increases supports 2Core.

- **10.8 Windows Server 2019 Additional 2 Core,Chinese,Standard,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2019-Chinese-Standard-expands the CPU Core License;
2. Each License increases supports 2Core.

- **10.9 Windows Server 2019 Additional 16 Core,English,Data Center,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2019-English-DataCenter-expands the CPU Core License;
2. Each License increases supports 16Core.

- **10.10 Windows Server 2019 Additional 16 Core,Chinese,Data Center,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2019-Chinese-DataCenter-expands the CPU Core License;
2. Each License increases supports 16Core.

- **10.11 Windows Server 2019 Additional 4 Core,English,Data Center,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2019-English-DataCenter-expands the CPU Core License;
2. Each License increases supports 4Core.

- **10.12 Windows Server 2019 Additional 4 Core,Chinese,Data Center,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2019-Chinese-DataCenter-expands the CPU Core License;
2. Each License increases supports 4Core.

- **10.13 Windows Server 2019 Additional 2 Core,English,Data Center,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2019-English-DataCenter-expands the CPU Core License;
2. Each License increases supports 2Core.

- **10.14 Windows Server 2019 Additional 2 Core,Chinese,Data Center,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2019-Chinese-DataCenter-expands the CPU Core License;
2. Each License increases supports 2Core.

- **10.15 Client Access License (CAL),1 Device,for Windows Server 2019,Chinese,General OEM,without product services**

1. The Windows Server 2019-Chinese Version-expands Device CAL License;
2. Each License increases 1pcs device side access authority.

- **10.16 Client Access License (CAL),1 Device,for Windows Server 2019,English,General OEM,without product services**

1. The Windows Server 2019-English Version-expands Device CAL License;
2. Each License increases 1pcs device side access authority.

- **10.17 Client Access License (CAL),10 Device,for Windows Server 2019,Chinese,General OEM,without product services**

1. The Windows Server 2019-Chinese Version-expands Device CAL License;
2. Each License increases 10pcs device side access authority.

- **10.18 Client Access License (CAL),10 Device,for Windows Server 2019,English,General OEM,without product services**

1. The Windows Server 2019-English Version-expands Device CAL License;
2. Each License increases 10pcs device side access authority.a

- **10.19 Client Access License (CAL),1 User,for Windows Server 2019,Chinese,General OEM,without product services**

1. The Windows Server 2019-Chinese Version-expands User CAL License;
2. Each License increases 1pcs user side access authority.

- **10.20 Client Access License (CAL),1 User,for Windows Server 2019,English,General OEM,without product services**

1. The Windows Server 2019-English Version-expands User CAL License;
2. Each License increases 1pcs user side access authority.

- **10.21 Client Access License (CAL),10 User,for Windows Server 2019,Chinese,General OEM,without product services**

1. The Windows Server 2019-Chinese Version-expands User CAL License;
2. Each License increases 10pcs user side access authority.

- **10.22 Client Access License (CAL),10 User,for Windows Server 2019,English,General OEM,without product services**

1. The Windows Server 2019-English Version-expands User CAL License;
2. Each License increases 10pcs user side access authority.

- **10.23 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2019,Chinese,1 User,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
8. The purchasing quantity is subject to actual requirements.

- **10.24 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2019,English,1 User,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
9. The purchasing quantity is subject to actual requirements.

- **10.25 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2019,Chinese,1 Device,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
4. The purchasing quantity is subject to actual requirements.

- **10.26 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2019,English,1 Device,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
5. The purchasing quantity is subject to actual requirements.

- **10.27 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2019,Chinese,5 User,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
6. The purchasing quantity is subject to actual requirements.

- **10.28 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2019,English,5 User,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
7. The purchasing quantity is subject to actual requirements.

- **10.29 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2019,Chinese,5 Device,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
6. The purchasing quantity is subject to actual requirements.

- **10.30 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2019,English,5 Device,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
7. The purchasing quantity is subject to actual requirements.

- **10.31 Windows Server 2016 Additional 16 Core,English,Standard,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2016-English-Standard-expands the CPU Core License;
2. Each License increases supports 16Core.

- 10.32 **Windows Server 2016 Additional 16 Core,Chinese,Standard,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2016-Chinese-Standard-expands the CPU Core License;
2. Each License increases supports 16Core.

- 10.33 **Windows Server 2016 Additional 4 Core,English,Standard,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2016-English-Standard-expands the CPU Core License;
2. Each License increases supports 4Core.

- 10.34 **Windows Server 2016 Additional 4 Core,Chinese,Standard,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2016-Chinese-Standard-expands the CPU Core License;
2. Each License increases supports 4Core.

- 10.35 **Windows Server 2016 Additional 2 Core,English,Standard,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2016-English-Standard-expands the CPU Core License;
2. Each License increases supports 2Core.

- 10.36 **Windows Server 2016 Additional 2 Core,Chinese,Standard,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2016-Chinese-Standard-expands the CPU Core License;
2. Each License increases supports 2Core.

- 10.37 **Windows Server 2016 Additional 16 Core,English,Data Center,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2016-English-DataCenter-expands the CPU Core License;
2. Each License increases supports 16Core.

- **10.38 Windows Server 2016 Additional 16 Core,Chinese,Data Center,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2016-Chinese-DataCenter-expands the CPU Core License;
2. Each License increases supports 16Core.

- **10.39 Windows Server 2016 Additional 4 Core,English,Data Center,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2016-English-DataCenter-expands the CPU Core License;
2. Each License increases supports 4Core.

- **10.40 Windows Server 2016 Additional 4 Core,Chinese,Data Center,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2016-Chinese-DataCenter-expands the CPU Core License;
2. Each License increases supports 4Core.

- **10.41 Windows Server 2016 Additional 2 Core,English,Data Center,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2016-English-DataCenter-expands the CPU Core License;
2. Each License increases supports 2Core.

- **10.42 Windows Server 2016 Additional 2 Core,Chinese,Data Center,x86,64bit,General OEM,COA Lic,No DVD,No Product Service,No CAL**

1. Windows Server 2016-Chinese-DataCenter-expands the CPU Core License;
2. Each License increases supports 2Core.

- **10.43 Client Access License (CAL),1 Device,for Windows Server 2016/2012R2,Chinese,General OEM,without product services**

1. The Windows Server 2016-Chinese Version-expands Device CAL License;
2. Each License increases 1pcs device side access authority.

- **10.44 Client Access License (CAL),1 Device,for Windows Server 2016/2012R2,English,General OEM,without product services**

1. The Windows Server 2016-English Version-expands Device CAL License;
2. Each License increases 1pcs device side access authority.

- **10.45 Client Access License (CAL),10 Device,for Windows Server 2016/2012R2,Chinese,General OEM,without product services**

1. The Windows Server 2016-Chinese Version-expands Device CAL License;
2. Each License increases 10pcs device side access authority.

- **10.46 Client Access License (CAL),10 Device,for Windows Server 2016/2012R2,English,General OEM,without product services**

1. The Windows Server 2016-English Version-expands Device CAL License;
2. Each License increases 10pcs device side access authority.a

- **10.47 Client Access License (CAL),1 User,for Windows Server 2016/2012R2,Chinese,General OEM,without product services**

1. The Windows Server 2016-Chinese Version-expands User CAL License;
2. Each License increases 1pcs user side access authority.

- **10.48 Client Access License (CAL),1 User,for Windows Server 2016/2012R2,English,General OEM,without product services**

1. The Windows Server 2016-English Version-expands User CAL License;
2. Each License increases 1pcs user side access authority.

- **10.49 Client Access License (CAL),10 User,for Windows Server 2016/2012R2,Chinese,General OEM,without product services**

1. The Windows Server 2016-Chinese Version-expands User CAL License;
2. Each License increases 10pcs user side access authority.

- **10.50 Client Access License (CAL),10 User,for Windows Server 2016/2012R2,English,General OEM,without product services**

1. The Windows Server 2016-English Version-expands User CAL License;
2. Each License increases 10pcs user side access authority.

- **10.51 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2016,Chinese,1 Device,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
4. The purchasing quantity is subject to actual requirements.

- **10.52 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2016,English,1 Device,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
5. The purchasing quantity is subject to actual requirements.

- **10.53 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2016,Chinese,5 User,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
6. The purchasing quantity is subject to actual requirements.

- **10.54 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2016,English,5 User,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
7. The purchasing quantity is subject to actual requirements.

- **10.55 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2016,Chinese,1 User,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
8. The purchasing quantity is subject to actual requirements.

- **10.56 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2016,English,1 User,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
9. The purchasing quantity is subject to actual requirements.

- **10.57 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2012/2012R2,Chinese,1 Device,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
10. The purchasing quantity is subject to actual requirements.

- **10.58 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2012/2012R2,English,1 Device,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
11. The purchasing quantity is subject to actual requirements.

- **10.59 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2012/2012R2,Chinese,5 User,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
12. The purchasing quantity is subject to actual requirements.

- **10.60 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2012/2012R2,English,5 User,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
13. The purchasing quantity is subject to actual requirements.

- **10.61 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2012/2012R2,Chinese,1 User,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
14. The purchasing quantity is subject to actual requirements.

- **10.62 Operating System Software,Remote Desktop Services Client Access License For Windows Server 2012/2012R2,English,1 User,without Service,General OEM**

1. Optional
2. One server is configured with one RDS CAL license.
3. The standard edition and data center edition are not distinguished.
15. The purchasing quantity is subject to actual requirements.

11. ===Enhanced software===

- **11.1 RAS features lift kit (ECC, eMCA2, SDDC, PFA)**

Operator oversea specific software, except Brazil.

- **11.2 Memory expansion kit**

Operator oversea specific software, except Brazil.

- **11.3 Hard Disk expansion kit**

Operator oversea specific software, except Brazil.

- **11.4 Integrated Network features (NCSI)**

Operator oversea specific software, except Brazil.

- **11.5 Firmware upgrade (to support remote batch upgrade function BMC, BIOS, CPLD and other firmware)**

Brazil-specific software.

- **11.6 Serial port redirection (SOL) (originally only output from the proximal end of the serial cable system serial data output redirected to a network device, and can accept input remote network devices for easy Remote Maintenance)**

Brazil-specific software.

- **11.7 Hard Disk Pre-diagnostic tools**

Brazil-specific software.

- **11.8 Virtual KVM (virtual local keyboard, monitor, and mouse to the remote device tool)**

Brazil-specific software.

- **11.9 Virtual Media (including virtual CDROM, virtual folder, virtual floppy and other virtual media)**

Brazil-specific software.

- **11.10 Intelligent energy management (including power capping, power statistics history and dynamic energy-saving technology)**

Brazil-specific software.