

# Themis CoolShell CS-3U System



## New 3RU Blade Server System

Preliminary Datasheet

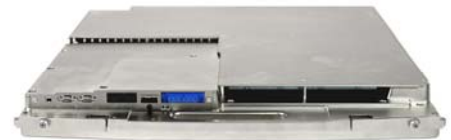
Themis' new CoolShell™ servers are designed for applications that need a compact, lightweight computing solution that must operate in demanding environments. CoolShell uses commercial off-the-shelf components to bring blade server efficiency and total cost of ownership to environmentally challenging applications. To keep the CoolShell CS-3U™ system cool, every module has its own integrated fans for cooling and there are no difficult to access, chassis level fan modules.

### CoolShell CS-3U System

The CoolShell CS-3U is a completely modular system that packs a high amount of functionality into a compact 3U, 17.75 inch deep rackmountable CoolShell Subrack. All modules are replaceable from the front increasing uptime and significantly reducing maintenance costs. All cable connections are on the front, no rear access is required. The CoolShell CS-3U includes five replaceable modules; a dual socket processor blade, an I/O module, media Blade and two power supply modules. The CoolShell CS-3U fits in a standard 19" rack.

#### Processor Blade

The CoolShell CS-3U processor Blade is based on a standard off-the-shelf motherboard. It includes two quad-core Xeon processors and two audio ports accessible from the front. The CoolShell CS-3U can be quickly updated to the latest processor technology since it is based on standard off the shelf components. New CoolShell CS-3U processor blades can be available shortly after new technology standard motherboards are brought to market. The CoolShell CS-3U server is easily upgraded to the latest technology by replacing an older processor blade with one based on the newest technology.



CoolShell CS-3U Processor Blade

#### I/O Blade

The CoolShell CS-3U I/O blade includes three 16-Lane PCI-express slots connected to the processor blade through the backplane of the CS-3U server. The I/O Blade can accommodate three high performance graphics cards or other standard PCI-express cards. Access to the standard cards is through the front. The CoolShell CS-3U server's I/O can be quickly updated to the newest technology by replacing standard PCI-express cards. Also included are six USB 2.0 ports (two ports are dedicated for keyboard and mouse use).



CoolShell CS-3U I/O Module

#### Media Module

The CoolShell CS-3U Media module provides a wide variety of connectivity including:

- Seven Optical or Copper Gigabit Ethernet ports
- Six USB 2.0 ports
- DVD/CD
- Removable 2.5" SATA drive, solid state or rotating
- One internal 2.5" SSD



CoolShell CS-3U Media Module

The Media module is removable from the front for simple maintenance.

#### Power Supplies

The CoolShell CS-3U includes redundant, hot swappable 850 Watt power supplies in an n+1 configuration.



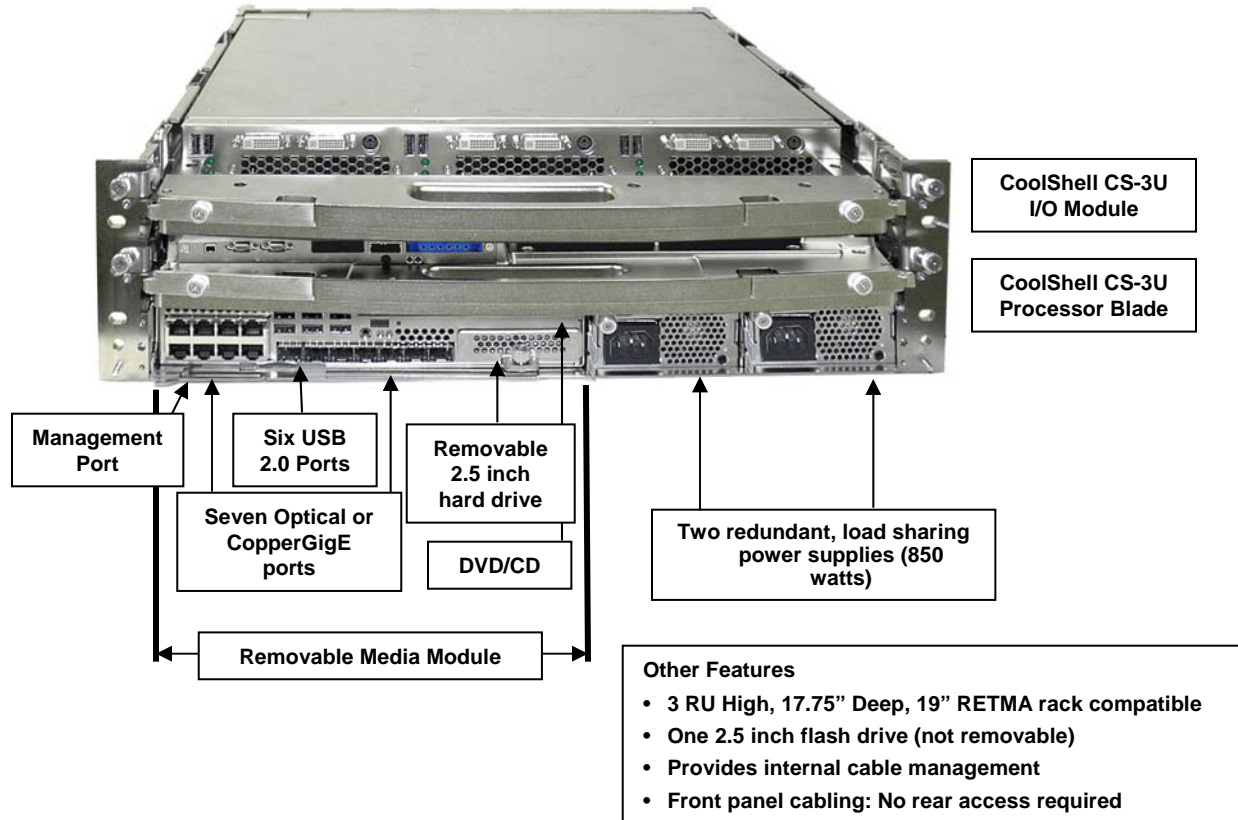
CoolShell CS-3U Power Supply Module

#### Optional Storage Expansion Box

- Up to 5 2.5-inch SAS/SATA drives



# CoolShell CS-3U Features



## Blade Environmentals

- Airflow direction: Front to Rear
- Operating Shock: up to 30G @ 25 ms (MIL-901D)
- Operating Vibration: 0.9G (rms) from 10 – 2000Hz
- Operating Temperature: 0° - 50°C sea level
- Humidity: up to 90% non-condensing
- Dimensions (HWD): 1RU  
1.625" (41.275 mm) x 16.50" (419.1 mm) x 17.00" (431.8 mm)

## Subrack Environmentals

- Airflow direction: Front to Rear
- Operating Shock: up to 30G @ 25 ms (MIL-901D)
- Operating Vibration: 0.9G (rms) from 10 – 2000Hz
- Operating Temperature: 0° - 50°C sea level
- Humidity: up to 90% non-condensing
- Dimensions (HWD): 3RU  
5.25 (133.35 mm) x 17.50" (444.5 mm) x 17.75" (450.85 mm)



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