

# viglen

## IT's Networking, Servers and Storage

Winter 2010



### NSSA

National Server & Storage Agreement

This purchasing framework offers Universities and other affiliated members the ability to procure Server and Storage products. As a certified supplier, you benefit from preferred pricing on servers and storage.

IT's Personal

Viglen is the only UK Public Sector IT Solutions organisation to be fully ISO 20000 accredited - the international standard for IT Service Management. ISO 20000-1 promotes the adoption of an integrated process approach to deliver managed services effectively and meet business and customer requirements. For further information, please see [www.viglen.co.uk](http://www.viglen.co.uk)

buying  
solutions  
supplier

### Infrastructure Case Study



To find out how Viglen can develop your infrastructure through the NSSA, look no further than our successful implementation at Lancaster University.

The University needed to modernise its storage infrastructure in order to build a low carbon, fail safe repository for its critical data. As a leading NSSA supplier, Viglen won the contract by consolidating the University's storage environment while lowering operational cost over the next five years. Viglen's ability to fully project manage and deliver within the demanding timeframe has impressed the University. The result? A successful combination of power saving and reduced TCO without compromising performance.

### Gold News



### Viglen strikes gold with Net App

Viglen achieves Gold Certified status with NetApp

Viglen has attained Gold Certified Status in the precious NetApp program. Viglen have achieved this status after scoring high marks in technical and sales training as well as allowing NetApp a compelling route-to-market to the education and public sectors.

This partnership will resonate well within the education and public sector as they look to simplify their data management, protect their investments and reduce the total cost of ownership. By incorporating NetApp technologies, Viglen will be able to reduce their customer's total cost of ownership by up to 62% through faster back up times, proven business continuity offerings and Viglen's in depth knowledge into cost effective solutions tailored for these sectors.

As a Gold Certified Partner, Viglen's customers will further benefit from end-to-end solutions including early exposure to NetApp's evolving product line, availability to demo equipment and specialist technical training.

"NetApp has identified Viglen as one of their principal partnerships, and this reflects how we, a British manufacturer and provider, compete with the large international players. I see this accreditation will strengthen our storage and data management portfolio for the benefit of our customers."

Bordan Tkachuk  
CEO, Viglen LTD

To find out how a Storage Solution from Viglen could benefit you, call our sales team on 01727 201 860 or email [sales@viglen.co.uk](mailto:sales@viglen.co.uk)

viglen  
Great  
Minds  
Think  
viglen



IT's Business Continuity

IT's Cost Efficient Storage Solutions

IT's Sustainable Storage




Our approach to providing storage solutions is to first understand the underlying issues that need addressing. This need could simply be for more capacity to cope with your growing data requirements or a tiered storage solution with snapshots, backup and off-site replication.

Whatever your needs, we can design a solution for you rather than your needs being tailored to fit our storage solutions. With years of expertise in defining, installing, implementing and supporting storage projects of all sizes, our storage experts can help you at every stage of your project.

Leveraging our partner relationships enables us to build a complete heterogeneous solution offering maximum flexibility, whilst still remaining easy to manage, maintain and support.

## IT's Open Standard Solutions

Viglen is working to deliver best of breed, open standard storage solutions including:

-  Storage consolidation and virtualisation
-  Backup
-  Data migration
-  Data de-duplication
-  Green data centres
-  Power management
-  Disaster recovery and business continuity planning
-  Consultancy and professional services

### Viglen Storage Solution Partners include:





**Data continues to grow while IT budgets become tighter. Throughout the public sector, organisations need to ensure their data is safely backed up in case of a disaster.**

## The challenge

Coleg Sir Gâr is one of the largest Further Education colleges in Wales. The college needed to ensure that its students and staff had unlimited access to systems across its 5 campuses in Carmarthenshire, South Wales, while controlling IT costs and meeting disaster recovery requirements.

Its existing set up, comprising of 40 physical servers and 40 virtualised servers, was proving vastly inefficient and very cumbersome to maintain. The college needed to migrate the remaining physical servers without expanding the power and cooling requirements in its server rooms.

## The aim

We needed a system that could handle the amount of input/output we required and which could be migrated to with minimum disruption said Simon Palmer, Systems Development Officer at Coleg Sir Gâr.

The college reviewed a number of solutions but chose to work with Viglen to migrate to a virtual storage environment. Coleg Sir Gâr wanted to gain more efficient data access for students and staff while radically reducing its power consumption using Hitachi Data Systems Adaptable Modular Storage 2100 (AMS 2100).

## The solution

“The Hitachi Data Systems’ solution was our hardware of choice because it offered additional storage at an affordable price” said Palmer.

Steve Murphy, the Managing Director of Hitachi Data Systems UK agrees. “We are seeing increasing demand for cost-effective storage solutions from the education sector and are pleased to help organisations like Coleg Sir Gâr meet their objectives. By introducing a virtualised SAN to its storage environment, the college has set itself up well to drive operational efficiencies across its infrastructure for a long time to come” he said.

Critical factors in the college’s decision to opt for the AMS 2100 solution were reliability, performance, total cost of ownership (TCO) and Viglen’s experience implementing large scale projects using Hitachi Data Systems technologies. The project was managed and carried out by Viglen, which also supplied extensive training and knowledge transfer to the Coleg Sir Gâr IT team.

## The result

As a result of the deployment, students at Coleg Sir Gâr are enjoying high-performing applications that enable them to work more effectively from any location. Migrating student data to virtualised SAN environment helped guarantee system performance while reducing storage operating costs.

Meanwhile their IT team can realise the potential of virtualisation on a new level, making resource allocation faster and simpler. Viglen and Hitachi

Data Systems achieved all of this while reducing the power consumed by Coleg Sir Gâr’s data centres by 30 percent.

## IT’s Viglen. IT’s Personal

Coleg Sir Gâr recognised the value of working with education and public sector specialist, Viglen, who has experience in delivering storage and backup solutions from Hitachi Data Systems including V&A Museum, Thameside NHS and Fife County Council.



**For more information about managing data please contact us**

**Email:** [sales@viglen.co.uk](mailto:sales@viglen.co.uk)

**Tel:** 01727 201 860

**Web:** [www.viglen.co.uk/hds](http://www.viglen.co.uk/hds)

# IT's Tower Servers

## IX1100 Pedestal Entry Level Server

Entry level servers are the perfect choice for environments with up to 50 users, such as small offices or individual classrooms. The general purpose entry level server's typical role would be for file, print or email tasks. It's a perfect platform for single applications where cost is a driver and performance is not mission-critical. All of our single socket servers utilise the power of the Intel® Xeon® 3400 series processors run on the Intel 3420 chipsets to provide essential server-class features.



|  |
|--|
| Intel® 3420 Chipset  |
| Intel® Xeon® Processor Dual Core L3406 2.26Ghz with 4MB Cache  |
| Six DIMM sockets for up to 32GB DDR3 memory                    |
| 1GB DDR3 1066Mhz registered Memory                             |
| Six SATA ports, supporting Software RAID levels 0, 1, 10 and 5 |
| Four 3.5" fixed drive bays and Three 5.25" Peripheral Bays     |

|   |
|---|
| 80 PLUS BRONZE                                      |
| intel SERVER BOARD inside™                          |
| Four PCI-Express and One PCI expansion slot         |
| Integrated Dual Intel® Gigabit Ethernet             |
| Integrated IPMI 2.0 baseboard management controller |
| Single fixed 400W PSU 80PLUS                        |
| Intel® System Management Software                   |
| 3 Years On-Site Next Business Day Warranty          |

Order code: **SERVERS**

Pedestal Server from **£624.00**

## IX2100 Pedestal Workgroup Server

The Viglen IX2100 is built around next generation intelligent Intel® Xeon® 5500 Series processors using Intel Quick Path Interconnect Technology to deliver outstanding performance and smooth multitasking.



|   |
|---|
| Tower Server Chassis  |
| Intel® 5500 High Performance Server Chipset   |
| Single Intel® Xeon® Dual Core E5503 2.0GHz 4MB 4.8 GT/sec   |
| Supported QPI 4.80 / 5.86 / 6.40 GT / sec   |
| 3GB Registered DDR3 1066MHz with nine DIMM sockets for up to 72GB of memory                           |
| Eight 3.5" Fixed Drive bays (Optional upgrade to Hot-Swap bays up to eight 3.5" or up to twelve 2.5") |
| Three 5.25" Peripheral Bays   |

|   |
|---|
| 80 PLUS BRONZE  |
| intel SERVER BOARD inside™  |
| Integrated SATA controller with RAID 0, 1, 10 (Optional RAID controller upgrades available) |
| Four PCI-Express Slots  |
| Integrated Dual Intel® Gigabit Ethernet   |
| 600W single fixed PSU, 80PLUS Bronze  |
| Intel® System Management Software   |
| 3 Year On-Site Next Business Day Warranty   |

Order code: **SERVERS**

Pedestal Server from **£939.00**

## IX4600 Pedestal Departmental Server

The IX4600 is Viglen's most powerful dual processor server and is ideal for business-critical databases, file servers and virtualisation infrastructures. The chassis can be rack-mounted with a conversion kit (measuring 5U) and ships power redundant ready in a 1+1 configuration. The IX4600 features tool-less hot-swap drive bays, power supply's and optional upgrade fans for simplified maintenance, lower service and support costs. Flexible storage configurations allow the chassis to house up to ten SATA/SAS drive bays and a choice of SAS RAID module upgrades.



|  |
|--|
| Intel® SC5600 Server Tower Chassis   |
| Intel® 5520 High Performance Server Chipset                                |
| Single Intel® Xeon® Dual Core E5503 2.0GHz 4MB 4.8 GT/sec                  |
| Supported QPI 4.80 / 5.86 / 6.40 GT/sec                                    |
| 3GB Registered DDR3 1066MHz with twelve DIMM sockets for up to 96GB memory |
| Up To Ten 3.5" Hot-Swap Hard drive bays                                    |
| Three 5.25" Peripheral   |

|  |
|--|
| 80 PLUS SILVER   |
| intel SERVER BOARD inside™   |
| Integrated SATA controller with RAID 0, 1, 10 (Optional RAID upgrades available) |
| Five PCI Express Slots   |
| Integrated Dual Intel® Gigabit Ethernet  |
| 750W PSU with Redundant 1+1  |
| Intel® System Management Software  |
| 3 Years On-Site Next Business Day Warranty                                       |

Order code: **SERVERS**

Pedestal Server from **£1,492.00**

**IX1100 Pedestal Server Processor upgrade options**

| Order Code | Description   | Watts | Price |
|------------|---|-------|-------|
| UAXTSL46   | Upgrade to One Intel® Xeon® Processor Quad Core L3426 1.86Ghz with 8MB Cache <b>LOW VOLTAGE</b> | 45W   | £82   |
| UAXTSX43   | Upgrade to One Intel® Xeon® Processor Quad Core X3430 2.40Ghz with 8MB Cache                    | 95W   | £11   |
| UAXTSX44   | Upgrade to One Intel® Xeon® Processor Quad Core X3440 2.53Ghz with 8MB Cache                    | 95W   | £22   |
| UAXTSX45   | Upgrade to One Intel® Xeon® Processor Quad Core X3450 2.66Ghz with 8MB Cache                    | 95W   | £46   |
| UAXTSX46   | Upgrade to One Intel® Xeon® Processor Quad Core X3460 2.80Ghz with 8MB Cache                    | 95W   | £109  |
| UAXTSX47   | Upgrade to One Intel® Xeon® Processor Quad Core X3470 2.93Ghz with 8MB Cache                    | 95W   | £338  |

**IX1100 Pedestal Server Memory Upgrade Options**

|           |   |      |
|-----------|---|------|
| 2GB(4P2)  | Upgrade to 2GB DDR3 1066MHz RDIMM (2x 1GB)  | £35  |
| 4GB(4P2)  | Upgrade to 4GB DDR3 1066MHz RDIMM (2x 2GB)  | £69  |
| 8GB(4P2)  | Upgrade to 8GB DDR3 1066MHz RDIMM (4x 2GB)  | £173 |
| 12GB(4P2) | Upgrade to 12GB DDR3 1066MHz RDIMM (6x 2GB) | £277 |
| 16GB(4P2) | Upgrade to 16GB DDR3 1066MHz RDIMM (4x 4GB) | £346 |
| 24GB(4P2) | Upgrade to 24GB DDR3 1066MHz RDIMM (6x 4GB) | £537 |

**IX1100 Pedestal Server Upgrade Options**

|          |   |      |
|----------|---|------|
| DVDWRK1  | Multi-format DVD Writer/CD-RW Drive - Black SATA for IX1010                     | £18  |
| DTDFNRD1 | Tandberg RDX Internal bare drive, black, SATA interface, Cartridge not included | £95  |
| DTDFNR1U | Tandberg RDX Internal bare drive, black, USB interface, Cartridge not included  | £95  |
| DTDFNRE1 | Tandberg RDX External USB drive, black, Cartridge not included                  | £105 |

**IX2100 and IX4600 Pedestal Server Processor upgrade options**

| Order Code | Description  | HT | TB | Watts | Price  |
|------------|--|----|----|-------|--------|
| UAXTR507   | Upgrade to Single Intel® Xeon® Processor Quad Core E5507, 2.26Ghz with 4MB and 4.8 GT/sec QPI                  | -  | -  | 80W   | £69    |
| UAXTR620   | Upgrade to Single Intel® Xeon® Processor Quad Core E5620 2.4Ghz with 12MB and 5.86 GT/sec QPI                  | ✓  | +2 | 80W   | £173   |
| UAXTR630   | Upgrade to Single Intel® Xeon® Processor Quad Core E5630 2.53Ghz with 12MB and 5.86 GT/sec QPI                 | ✓  | +2 | 80W   | £304   |
| UAXTR650   | Upgrade to Single Intel® Xeon® Processor Six Core X5650 2.66Ghz with 12MB and 6.40 GT/sec QPI                  | ✓  | +3 | 95W   | £662   |
| UAXTR660   | Upgrade to Single Intel® Xeon® Processor Six Core X5660 2.80Ghz with 12MB and 6.40 GT/sec QPI                  | ✓  | +3 | 95W   | £842   |
| UAXTR680   | Upgrade to Single Intel® Xeon® Processor Six Core X5680 3.33Ghz with 12MB and 6.40 GT/sec QPI                  | ✓  | +2 | 130W  | £1,200 |
| U2XTR503   | Upgrade to Two Intel® Xeon® Processor Dual Core E5503 2.00Ghz with 4MB and 4.8 GT/sec QPI                      | -  | -  | 80W   | £170   |
| U2XTR507   | Upgrade to Two Intel® Xeon® Processor Quad Core E5507 2.26Ghz with 4MB and 4.8 GT/sec QPI                      | -  | -  | 80W   | £307   |
| U2XTR620   | Upgrade to Two Intel® Xeon® Processor Quad Core E5620 2.4Ghz with 12MB and 5.86 GT/sec QPI                     | ✓  | +2 | 160W  | £485   |
| U2XTR630   | Upgrade to Two Intel® Xeon® Processor Quad Core E5630 2.53Ghz with 12MB and 5.86 GT/sec QPI                    | ✓  | +2 | 160W  | £747   |
| U2XTR650   | Upgrade to Two Intel® Xeon® Processor Six Core X5650 2.66Ghz with 12MB and 6.40 GT/sec QPI                     | ✓  | +3 | 160W  | £1,464 |
| U2XTR660   | Upgrade to Two Intel® Xeon® Processor Six Core X5660 2.80Ghz with 12MB and 6.40 GT/sec QPI                     | ✓  | +3 | 160W  | £1,822 |
| U2XTR680   | Upgrade to Two Intel® Xeon® Processor Six Core X5680 3.33Ghz with 12MB and 6.40 GT/sec QPI <b>LOW VOLTAGE</b>  | ✓  | +2 | 260W  | £2,539 |
| UAXTL609   | Upgrade to Single Intel® Xeon® Processor Quad Core L5609, 1.86Ghz, 12MB and 4.8 GT/sec QPI <b>LOW VOLTAGE</b>  | -  | -  | 40W   | £214   |
| UAXTL630   | Upgrade to Single Intel® Xeon® Processor Quad Core L5630, 2.13Ghz, 12MB and 5.86 GT/sec QPI <b>LOW VOLTAGE</b> | ✓  | +2 | 40W   | £304   |
| UAXTL640   | Upgrade to Single Intel® Xeon® Processor Six Core L5640, 2.26Ghz, 12MB and 5.86GT/sec QPI <b>LOW VOLTAGE</b>   | ✓  | +4 | 60W   | £662   |
| U2XTL609   | Upgrade to Two Intel® Xeon® Processor Quad Core L5609, 1.86Ghz, 12MB and 4.8 GT/sec QPI <b>LOW VOLTAGE</b>     | -  | -  | 80W   | £568   |
| U2XTL630   | Upgrade to Two Intel® Xeon® Processor Quad Core L5630, 2.13Ghz, 12MB and 5.86 GT/sec QPI <b>LOW VOLTAGE</b>    | ✓  | +2 | 80W   | £747   |

**HT** = Intel® Hyper-Threading Technology - Boosts performance for parallel and multi-threaded applications

**TB** = Intel® Turbo Boost Technology - Boosts performance for specific workloads by increasing processor frequency

**IX2100 and IX4600 Pedestal Server Memory upgrade options**

Our IX2100 and IX4600 servers use DDR3 Registered DIMM memory technology. To ensure a "balanced" system configuration the options below are recommended memory upgrades for single and dual processors. Single CPU upgrades utilise a 3-channel model by only populating 6 DIMM sockets. Dual CPU upgrades ensure all 6-channels over 12 DIMM sockets are populated for highest bandwidth and performance.

**Single Memory Upgrade Options**

|            |   |        |
|------------|---|--------|
| 6GB(12B3)  | Upgrade to 6GB DDR3 1333MHz Registered DIMM (3x 2GB)  | £51    |
| 12GB(12B3) | Upgrade to 12GB DDR3 1333MHz Registered DIMM (3x 4GB) | £179   |
| 24GB(12B6) | Upgrade to 24GB DDR3 1333MHz Registered DIMM (6x 4GB) | £461   |
| 48GB(12B6) | Upgrade to 48GB DDR3 1333MHz Registered DIMM (6x 8GB) | £1,025 |

**Dual Memory Upgrade Options**

|             |  |        |
|-------------|--|--------|
| 6GB(12B6)   | Upgrade to 6GB DDR3 1333MHz Registered DIMM (6x 1GB)   | £103   |
| 12GB(12B6)  | Upgrade to 12GB DDR3 1333MHz Registered DIMM (6x 2GB)  | £205   |
| 24GB(12B12) | Upgrade to 24GB DDR3 1333MHz Registered DIMM (12x 2GB) | £513   |
| 48GB(12B12) | Upgrade to 48GB DDR3 1333MHz Registered DIMM (12x 4GB) | £1,025 |

**IX2100 and IX4600 Pedestal Server upgrade options**

|          |  |      |
|----------|--|------|
| PSX4HS05 | Vig842 4-Bay 3.5" SATA/SAS hot-Swap HDD Cage for IX2100  | £38  |
| USX4HS05 | Vig842 8-Bay 3.5" SATA/SAS hot-Swap HDD Cage for IX2100  | £76  |
| PSX6HS01 | Vig842 6-Bay 2.5" SAS hot-Swap HDD Cage for IX2100       | £60  |
| USX6HS01 | Vig842 12-Bay 2.5" SAS hot-Swap HDD Cage for IX2100      | £119 |
| URACK840 | Vig842 Rackmount Kit for IX2100                          | £45  |
| PSX5HSN5 | IX4600 4 Bay SATA hot-swap non-expanded, Hard drive cage | £68  |
| PSX5HS06 | IX4600 6 Bay SATA/SAS hot-swap, expander Hard drive cage | £104 |
| PSX5HS05 | IX4600 4 Bay SATA/SAS hot-swap expander, Hard drive cage | £83  |

# IT's Rack Servers

Viglen's next-generation Workgroup Servers use the power of Intel® Xeon® 5500/5600 series processors and Intel® QuickPath Interconnect technology to maximise performance. All models support up to two processors and both pedestal or rack mount versions offer enterprise class features and scalable management as standard.



## IX2300/R 1U Workgroup Server

Intel® 5520 High Performance Server Chipset  
 Single Intel® Xeon® Dual Core E5503 2.0GHz 4MB 4.8 GT/sec  
 Supported QPI 4.80 / 5.86 / 6.40 GT / sec  
 3GB Registered DDR3 1066MHz with Twelve DIMM sockets for up to 192GB memory  
 Integrated SATA controller with RAID 0, 1, 10  
 (Optional RAID 5 with activation key)  
 Three 3.5" Hot-Swap Drive Bays

Optional Slim-line optical / floppy Drive  
 One full height PCI-Express slot  
 Integrated Dual Intel® Gigabit Ethernet  
 600W Fixed high-efficiency power supply  
 Intel® System Management Software  
 3 Year On-Site Next Business Day Warranty

Order code: **SERVERS** Rackmount Server from **£1,220.00**

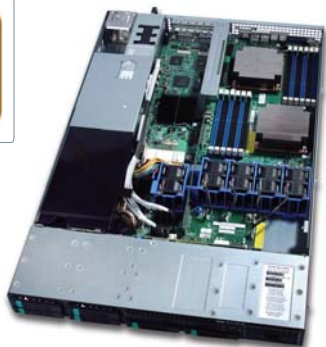


## IX2600/R 2U Workgroup Server

Intel® 5520 High Performance Server Chipset  
 Single Intel® Xeon® Dual Core E5503 2.0GHz 4MB 4.8 GT/sec  
 Supported QPI 4.80 / 5.86 / 6.40 GT / sec  
 3GB Registered DDR3 1066MHz with twelve DIMM sockets for up to 192GB memory  
 Integrated SATA controller with RAID 0, 1, 10 (Optional RAID 5 with activation key)  
 Six 3.5" Hot-Swap Drive Bays

Optional Slim-line optical / floppy Drive  
 Three Full Height PCI-Express Slots (Optional Slots Available)  
 Integrated Dual Intel® Gigabit Ethernet  
 750W PSU with Redundant 1+1 Option  
 Intel® System Management Software  
 3 Year On-Site Next Business Day Warranty

Order code: **SERVERS** Rackmount Server from **£1,449.00**



## IX2320/RS 1U Workgroup Server

Intel® 5520 High Performance Server Chipset  
 Single Intel® Xeon® Dual Core E5503 2.0GHz 4MB 4.8 GT/sec  
 Supported QPI 4.80 / 5.86 / 6.40 GT / sec  
 3GB Registered DDR3 1066MHz with twelve DIMM sockets for up to 192GB memory  
 Eight 2.5" Hot-Swap Drive Bays  
 Integrated SATA / SAS controller with RAID 0, 1, 10  
 (Optional upgrade to hardware RAID)

Optional Slim-line optical / floppy Drive  
 One Full height PCI-Express slot  
 Integrated Dual Intel® Gigabit Ethernet  
 650W Hot-Swap PSU with Redundant 1+1 Option  
 Intel® System Management Software  
 3 Year On-Site Next Business Day Warranty

Optional Embedded Virtualisation Hardware available

Order code: **SERVERS** Rackmount Server from **£1,526.00**



## IX2620/RS 2U Workgroup Server

Intel® 5520 High Performance Server Chipset  
 Single Intel® Xeon® Dual Core E5503 2.0GHz 4MB 4.8 GT/sec  
 Supported QPI 4.80 / 5.86 / 6.40 GT/sec  
 3GB Registered DDR3 1066MHz with twelve DIMM sockets for up to 192GB memory  
 Eight 2.5" Hot-Swap Drive Bays  
 Integrated SATA/SAS controller with RAID 0, 1, 10  
 (Optional upgrade to hardware RAID)

Optional Slim-line optical / floppy Drive  
 Three full height and two low-profile PCI-Express Slots  
 (Optional PCI-X Slots Available)  
 Integrated Dual Intel® Gigabit Ethernet  
 750W PSU with Redundant 1+1 Option  
 Intel® System Management Software  
 3 Year On-Site Next Business Day Warranty

Optional Embedded Virtualisation Hardware available

Order code: **SERVERS** Rackmount Server from **£1,536.00**

**Rackmount Workgroup Server Processor Upgrade options**

See key below for abbreviations

| Order Code | Description  | HT | TB | Watts | Price  |
|------------|--|----|----|-------|--------|
| UAXTR507   | Upgrade to Single Intel® Xeon® Processor Quad Core E5507, 2.26Ghz with 4MB and 4.8 GT/sec QPI  | -  | -  | 80W   | £69    |
| UAXTR620   | Upgrade to Single Intel® Xeon® Processor Quad Core E5620 2.4Ghz with 12MB and 5.86 GT/sec QPI  | ✓  | +2 | 80W   | £173   |
| UAXTR630   | Upgrade to Single Intel® Xeon® Processor Quad Core E5630 2.53Ghz with 12MB and 5.86 GT/sec QPI | ✓  | +2 | 80W   | £304   |
| UAXTR650   | Upgrade to Single Intel® Xeon® Processor Six Core X5650 2.66Ghz with 12MB and 6.40 GT/sec QPI  | ✓  | +3 | 95W   | £662   |
| UAXTR660   | Upgrade to Single Intel® Xeon® Processor Six Core X5660 2.80Ghz with 12MB and 6.40 GT/sec QPI  | ✓  | +3 | 95W   | £842   |
| UAXTR680   | Upgrade to Single Intel® Xeon® Processor Six Core X5680 3.33Ghz with 12MB and 6.40 GT/sec QPI  | ✓  | +2 | 130W  | £1,200 |
| U2XTR503   | Upgrade to Two Intel® Xeon® Processor Dual Core E5503 2.00Ghz with 4MB and 4.8 GT/sec QPI      | -  | -  | 80W   | £170   |
| U2XTR507   | Upgrade to Two Intel® Xeon® Processor Quad Core E5507 2.26Ghz with 4MB and 4.8 GT/sec QPI      | -  | -  | 160W  | £307   |
| U2XTR620   | Upgrade to Two Intel® Xeon® Processor Quad Core E5620 2.4Ghz with 12MB and 5.86 GT/sec QPI     | ✓  | +2 | 160W  | £485   |
| U2XTR630   | Upgrade to Two Intel® Xeon® Processor Quad Core E5630 2.53Ghz with 12MB and 5.86 GT/sec QPI    | ✓  | +2 | 160W  | £747   |
| U2XTR650   | Upgrade to Two Intel® Xeon® Processor Six Core X5650 2.66Ghz with 12MB and 6.40 GT/sec QPI     | ✓  | +3 | 160W  | £1,464 |
| U2XTR660   | Upgrade to Two Intel® Xeon® Processor Six Core X5660 2.80Ghz with 12MB and 6.40 GT/sec QPI     | ✓  | +3 | 160W  | £1,822 |
| U2XTR680   | Upgrade to Two Intel® Xeon® Processor Six Core X5680 3.33Ghz with 12MB and 6.40 GT/sec QPI     | ✓  | +2 | 260W  | £2,539 |
| UAXTL609   | Upgrade to Single Intel® Xeon® Processor Quad Core L5609, 1.86Ghz, 12MB and 4.8 GT/sec QPI     | -  | -  | 40W   | £214   |
| UAXTL630   | Upgrade to Single Intel® Xeon® Processor Quad Core L5630, 2.13Ghz, 12MB and 5.86 GT/sec QPI    | ✓  | +2 | 40W   | £304   |
| UAXTL640   | Upgrade to Single Intel® Xeon® Processor Six Core L5640, 2.26Ghz, 12MB and 5.86GT/sec QPI      | ✓  | +4 | 60W   | £662   |
| U2XTL609   | Upgrade to Two Intel® Xeon® Processor Quad Core L5609, 1.86Ghz, 12MB and 4.8 GT/sec QPI        | -  | -  | 80W   | £568   |
| U2XTL630   | Upgrade to Two Intel® Xeon® Processor Quad Core L5630, 2.13Ghz, 12MB and 5.86 GT/sec QPI       | ✓  | +2 | 80W   | £747   |
| U2XTL640   | Upgrade to Two Intel® Xeon® Processor Six Core L5640, 2.26Ghz, 12MB and 5.86GT/sec QPI         | ✓  | +4 | 120W  | £1,464 |

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**TB** = Intel® Turbo Boost Technology - Boosts performance for specific workloads by increasing processor frequency

**Rackmount Workgroup Server Memory Upgrade Options**

Our workgroup servers use DDR3 Registered DIMM memory technology. To ensure a “balanced” system configuration the options below are recommended memory upgrades for single and dual processors. Single CPU upgrades utilise a 3-channel model by only populating 6 DIMM sockets. Dual CPU upgrades ensure all 6-channels over 12 DIMM sockets are populated for highest bandwidth and performance.

**Rackmount Single Memory Upgrade Options**

|            |   |        |
|------------|---|--------|
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| 12GB(12B3) | Upgrade to 12GB DDR3 1333MHz Registered DIMM (3x 4GB) | £179   |
| 24GB(12B6) | Upgrade to 24GB DDR3 1333MHz Registered DIMM (6x 4GB) | £461   |
| 48GB(12B6) | Upgrade to 48GB DDR3 1333MHz Registered DIMM (6x 8GB) | £1,025 |

**Rackmount Dual Memory Upgrade Options**

|             |  |        |
|-------------|--|--------|
| 6GB(12B6)   | Upgrade to 6GB DDR3 1333MHz Registered DIMM (6x 1GB)   | £103   |
| 12GB(12B6)  | Upgrade to 12GB DDR3 1333MHz Registered DIMM (6x 2GB)  | £205   |
| 24GB(12B12) | Upgrade to 24GB DDR3 1333MHz Registered DIMM (12x 2GB) | £513   |
| 48GB(12B12) | Upgrade to 48GB DDR3 1333MHz Registered DIMM (12x 4GB) | £1,025 |

**Rackmount Workgroup Server Expansion Slot Options**

| Order Code | Description   | Price |
|------------|---|-------|
| PSXSRU86   | IX2300/2320 Full Height PCI-Express Riser Card (1x PCIe)                            | £23   |
| PSXSRU77   | IX2600/2620 PCI-Express Riser (3x Full Height slots and 2x Low Profile slots)       | £64   |
| PSXSRU80   | IX2600/2620 PCI-Express Riser with PCI-X bridge (2x PCI-X slots and 3x PCI-e slots) | £65   |

**Rackmount Workgroup Server Expansion Module Options**

|          |   |      |
|----------|---|------|
| CNCEP10M | Dual port Gb Ethernet I/O Expansion Module (Can only have single module per server)       | £105 |
| CNCEP40M | Quad port Gb Ethernet I/O Expansion Module (Can only have single module per server)       | £348 |
| CNCEPCXM | Dual CX4 port 10Gb Ethernet I/O Expansion module (Can only have single module per server) | £459 |
| PSXSR002 | External 4-Port SAS I/O Expansion Module (Can only have single module per server)         | £85  |

**Rackmount Workgroup Server Upgrade Options**

|          |  |      |
|----------|--|------|
| PSXSR161 | SATA Software RAID 5 Activation Key for IX2300 and IX2600 servers                                  | £60  |
| UDCRSRU1 | Integrated SAS RAID Activation Key with 512MB Cache - RS Series only                               | £250 |
| UDCRSRU2 | Integrated SAS RAID Activation Key with 512MB Cache and BBU - RS Series only                       | £389 |
| PDCRSR09 | RAID Smart Battery Backup Module - RS Series only  | £139 |
| PPGSPSH9 | IX2320RS 1U 650W (1+1) Redundant Power Supply Module   | £148 |
| PPGSPSH8 | IX2600/2620 2U 750W (1+1) Redundant Power Supply Module  | £135 |
| PSXS2509 | IX2600 SAS/SATA Tape Drive Mounting Kit (This will only allow up to 5 hard drives to be installed) | £32  |
| PSXS2607 | IX2600 Redundant fan upgrade kit   | £144 |
| PSXSRUFR | Tool-less Full Extension Sliding Rail Kit upgrade for workgroup rack mount servers                 | £63  |
| PSXSRUCM | 19" Rackmount Server Cable Management Arm used only with PSXSRUFR                                  | £54  |

**Viglen is an expert at designing and implementing full or part virtualised server environments with a range of storage, backup and networking options.**

To find out how a Server Virtualisation Solution from Viglen could benefit you, call our sales team on 01727 201 860 or email sales@viglen.co.uk

# IT's Modular Servers

## IX9000 Modular Server Chassis

Viglen's Modular Server for Rack Dense computing environments.

The Viglen IX9000 Modular server is an integrated system that has SAN storage, computing and networking all built in. This gives it capabilities not found in common rack server setups such as shared virtual drives that grow as you grow and virtual presence management. The Viglen IX9000 Modular server can accommodate up to six compute nodes, each one capable of running two Multi-Core Intel® Xeon® processors.

vmware®



- 6U Rackmount chassis
- Six Viglen Compute bays
- 14 Hot-swap 2.5" SAS drive bays
- Includes one Hot-Swap I/O Fan Module
- Includes Ethernet Switch Module (Up to two supported)
- Includes Storage Control Module with Battery Backup (Up to two supported)

- Includes two PSUs (Up to four supported for 3+1 redundancy)
- Includes two Hot-Swap fan modules
- Tool-less rail kit
- 3 Years On-Site Next Business Day Warranty

### Storage



The Intel® Storage Controller virtualises the integrated shared storage through a SAN fabric that connects the compute modules to the 14 2.5-inch SAS drives. The Viglen IX9000 Modular Server system includes a storage controller with a redundant option available. RAID levels supported 0, 1, 1E, 5, 6, 10, 50 and 60.

### Network



The Intel® Gigabit Ethernet Switch provides integrated networking and Intelligent Layer 2+ switch functions. Featuring twelve internal 1Gb Ethernet full-duplex ports (2 per compute module) and 10 external 10/100/1000 Gb Ethernet full-duplex ports to provide enough performance to handle demanding applications.

### Management



The Intel® Management Module provides a virtual presence GUI for managing the entire Viglen IX9000 Modular Server system. It allows in-band and out-of-band management of the compute modules, integrated shared storage and Ethernet switch.

Order code: **SERVERS** Pedestal Server from **£2,764.00**

| Viglen IX9000 Modular Chassis Options |   |        |
|---------------------------------------|---|--------|
| Order Code                            | Description   | Price  |
| PSXSRSLK                              | IX9000 Shared LUN License activation key to allow two or more compute modules to access a LUN                                 | £259   |
| PSXSRMSC                              | 1000W (3+1) Redundant Power Supply Module for IX9000 Modular Server (Additional PSU required for four or more IX9100 Modules) | £174   |
| PSXSRMSB                              | Additional Gigabit Ethernet Switch Module for IX9000 Modular Server   | £944   |
| PSXSRMSA                              | Additional SAS Storage Module (including battery backup) for IX9000 Modular Server Chassis                                    | £1,299 |

| Enterprise SAS Hard Drive Options for IX9000 Modular Chassis |   |      |
|--|---|------|
| DHDS414B   | Fujitsu 147GB 2.5" Small form factor SAS 10,000RPM HDD  | £118 |
| DHDS4300   | Fujitsu 300GB 2.5" Small form factor SAS 10,000RPM HDD  | £196 |
| DHDS4450   | Fujitsu 450GB 2.5" Small form factor SAS 10,000RPM HDD  | £239 |
| DHDS4600   | Fujitsu 600GB 2.5" Small form factor SAS 10,000RPM HDD  | £337 |
| DHDS473C   | Fujitsu 73.5GB 2.5" Small form factor SAS 15,000RPM HDD | £145 |
| DHDS414C   | Fujitsu 147GB 2.5" Small form factor SAS 15,000RPM HDD  | £174 |

Now you can select your compute modules from the next page



## IX9200 Compute Modules

The IX9200 Server Compute Modules provide the processing and I/O power behind the Viglen IX9000 Modular Server and supports up to two multi core Intel® Xeon® processors. The compute modules are entirely diskless and connect to the virtualised shared storage allowing for flexible server configurations.



|   |
|---|
| Intel® 5520 chipset   |
| Supported QPI 4.8 / 5.8 / 6.4 GT/sec  |
| Single Intel® Xeon® Processor Dual Core E5503, 2.0 Ghz                        |
| 3GB Registered DDR3 1066MHz with 12 DIMM sockets supporting up to 96GB memory |
| Integrated Dual Intel® Gigabit Ethernet                                       |

|  |
|--|
| (Optional upgrade to quad port via mezzanine card)         |
| Integrated LSI 1064e Controller (access to shared storage) |
| Integrated graphics controller                             |
| Integrated Remote Management (KVM over IP)                 |
| 3 Years On-Site Next Business Day Warranty                 |

Order code: **MODULARSERV**

IX9200 Module from **£1,095.00**

### Viglen IX9200 Compute Modules Options

| Order Code | Description  | Price |
|------------|--|-------|
| PSXSRMVD   | Dual Gigabit Ethernet I/O Expansion Mezzanine Card for IX9200 Compute Module (Total of 4 Ports per module) | £104  |

### Viglen IX9200 Compute Modules Processor Options

| Order Code | Description  | HT | TB | Watts | Price  |
|------------|--|----|----|-------|--------|
| U2XTR507   | Upgrade to Two Intel Xeon Processor Quad Core E5507 2.26Ghz with 4MB and 4.8 GT/sec QPI  | -  | -  | 160W  | £307   |
| U2XTR620   | Upgrade to Two Intel Xeon Processor Quad Core E5620 2.4Ghz with 12MB and 5.86 GT/sec QPI | ✓  | +2 | 160W  | £485   |
| U2XTR650   | Upgrade to Two Intel Xeon Processor Six Core X5650 2.66Ghz with 12MB and 6.40 GT/sec QPI | ✓  | +3 | 190W  | £1,464 |
| U2XTR680   | Upgrade to Two Intel Xeon Processor Six Core X5680 3.33Ghz with 12MB and 6.40 GT/sec QPI | ✓  | +2 | 260W  | £2,539 |

**HT** = Intel® Hyper-Threading Technology - Boosts performance for parallel and multi-threaded applications

**TB** = Intel® Turbo Boost Technology - Boosts performance for specific workloads by increasing processor frequency

### Rackmount Single Memory Upgrade Options

|            |   |        |
|------------|---|--------|
| 6GB(12B3)  | Upgrade to 6GB DDR3 1333MHz Registered DIMM (3x 2GB)  | £51    |
| 12GB(12B3) | Upgrade to 12GB DDR3 1333MHz Registered DIMM (3x 4GB) | £179   |
| 24GB(12B6) | Upgrade to 24GB DDR3 1333MHz Registered DIMM (6x 4GB) | £461   |
| 48GB(12B6) | Upgrade to 48GB DDR3 1333MHz Registered DIMM (6x 8GB) | £1,025 |

### Rackmount Dual Memory Upgrade Options

|             |  |        |
|-------------|--|--------|
| 6GB(12B6)   | Upgrade to 6GB DDR3 1333MHz Registered DIMM (6x 1GB)   | £103   |
| 12GB(12B6)  | Upgrade to 12GB DDR3 1333MHz Registered DIMM (6x 2GB)  | £205   |
| 24GB(12B12) | Upgrade to 24GB DDR3 1333MHz Registered DIMM (12x 2GB) | £513   |
| 48GB(12B12) | Upgrade to 48GB DDR3 1333MHz Registered DIMM (12x 4GB) | £1,025 |

## Promise Storage subsystem for IX9000 Modular Server

Grow your capacity with the Promise VTrak E310 series RAID subsystem for use with the Viglen IX9000 Modular Server. Featuring dual Active/Active RAID controllers with automatic Failover capabilities and SAS/Fibre connectivity. The Promise VTrak RAID subsystem delivers the performance, scalability and affordability that the small to medium business needs for their expanding storage requirements.

### Features

- 12 hot-swappable drive bays in a robust 2U chassis
- Flexibility to use SAS and SATA 3Gb/sec drives simultaneously
- Data protection with RAID 0 / 1 / 1E / 10 / 5 / 6 / 50 / 60 with dedicated hot-spare drives support
- Redundant, hot-swappable power and cooling modules.
- Embedded web-based management GUI via Ethernet
- PerfectRAID® and Predictive Data Migration® technology for robust error handling and recovery



### Promise VTrak Storage System

|          |  |        |
|----------|--|--------|
| PSXPE3SS | VTrak E310s 12-bay RAID Storage system with Single SATA/SAS controller - Approved for IX9000 | £3,272 |
| PSXPE3SD | VTrak E310s 12-bay RAID Storage system with Dual SATA/SAS controller - Approved for IX9000   | £4,818 |
| PSXPE3FS | VTrak E310f 12-bay RAID Storage system with Single Fibre controller                          | £3,537 |
| PSXPE3FD | VTrak E310f 12-bay RAID Storage system with Dual Fibre Controller System                     | £5,276 |
| PSXPE3S3 | VTrak M310i 12-bay iSCSI SATA RAID Storage System  | £3,143 |

### Promise VTrak Storage Upgrades and Options

|          |  |        |
|----------|--|--------|
| PSXPE10S | VTrak SAS I/O Controller unit 2x SAS Ports - extension unit for E310s                          | £1,624 |
| PSXPE10F | VTrak Fibre I/O Controller unit 2x Fibre Channel 4 Gb/s - extension unit for E310f             | £1,624 |
| PSXPE3JS | VTrak J310s 12-bay 3.5" storage system with Single JBOD I/O module - Expansion for E310 series | £1,891 |
| PSXPE3JD | VTrak J310s 12-bay 3.5" storage system with Dual JBOD I/O modules - Expansion for E310 series  | £2,319 |
| PSXPE301 | VTrak 1GB module for E-Class Note: BBU update required to 4 Cell                               | £174   |
| PSXPE302 | VTrak 2GB module for E-Class Note: BBU update required to 4 Cell                               | £290   |
| PSXPE3BB | Vtrak BBU Battery upgrade pack from 2 Cell to 4 Cell - Used with memory update                 | £99    |
| PCXSAEP1 | VTrak MiniSAS (SFF-8088) to MiniSAS (SFF-8088), 1 meter  | £46    |
| PCXSAEP3 | VTrak MiniSAS (SFF-8088) to MiniSAS (SFF-8088), 3 meter  | £69    |
| PCXSAEP5 | VTrak MiniSAS (SFF-8088) to MiniSAS (SFF-8088), 5 meter  | £104   |
| PCXPLOF5 | VTrak LC-LC MultiMode Fibre Cable (duplex), 15 meter   | £70    |

Viglen offer a range of expandability and connectivity options for any infrastructure requirements such as virtualisation or storage. We have partnered with Adaptec to bring you Unified Serial controller cards with intelligent power management to reduce power consumption as much as 70% without comprising performance. Emulex HBAs offer best-in-class SAN performance and functionality for all your fibre connectivity needs.

### Emulex Fibre Card Options

| Order Code | Description   | IX1100 | IX2100 | IX2300R | IX2600R | IX2320RS | IX2620RS | IX4600 | Price  |
|------------|---|--------|--------|---------|---------|----------|----------|--------|--------|
| PDCFCE41   | Emulex 4Gb Single Port Fibre Channel HBA, PCIe, LC multi-mode optic | -      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £600   |
| PDCFCE42   | Emulex 4Gb Dual Port Fibre Channel HBA, PCIe, LC multi-mode optic   | -      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £907   |
| PDCFCE44   | Emulex 4Gb Quad Port Fibre Channel HBA, PCIe, LC multi-mode optic   | -      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £1,338 |
| PDCFCE81   | Emulex 8Gb Single Port Fibre Channel HBA, PCIe, LC multi-mode optic | -      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £667   |
| PDCFCE82   | Emulex 8Gb Dual Port Fibre Channel HBA, PCIe, LC multi-mode optic   | -      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £954   |
| PDCFCE84   | Emulex 8Gb Quad Port Fibre Channel HBA, PCIe, LC multi-mode optic   | -      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £1,914 |

### Adaptec Unified RAID Controller Cards

| Order Code | Description  | IX1100 | IX2100 | IX2300R | IX2600R | IX2320RS | IX2620RS | IX4600 | Price |
|------------|--|--------|--------|---------|---------|----------|----------|--------|-------|
| PDCRA140   | Adaptec® 1405, SAS, 4 Internal ports, HBA, Suitable for Internal devices requiring no RAID | ✓      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £112  |
| PDCRA104   | Adaptec® 1045, SAS, 4 External ports, HBA Suitable for External devices requiring no RAID  | ✓      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £130  |
| PDCRS540   | Adaptec® 5405 RAID Controller 4 Internal ports, PCIe, Low Profile, 256MB Cache             | ✓      | ✓      | ✓       | ✓       | -        | -        | ✓      | £269  |
| PDCRS544   | Adaptec® 5445 RAID Controller 4 Internal/4 External ports, PCIe, Low Profile, 256MB Cache  | -      | ✓      | ✓       | ✓       | -        | -        | ✓      | £386  |
| PDCRS580   | Adaptec® 5805 RAID Controller 8 Internal ports, PCIe, Low Profile, 512MB Cache             | -      | ✓      | -       | ✓       | -        | ✓        | ✓      | £394  |
| PDCRS508   | Adaptec® 5085 RAID Controller 8 External ports, PCIe, Low Profile, 512MB Cache             | -      | ✓      | -       | ✓       | ✓        | ✓        | ✓      | £624  |
| PDCBB800   | Adaptec® Battery Module 800 - Supported on Series 3 and 5 RAID Cards                       | -      | -      | -       | -       | -        | -        | -      | £99   |

### Adaptec SCSI Cards

| Order Code | Description  | IX1100 | IX2100 | IX2300R | IX2600R | IX2320RS | IX2620RS | IX4600 | Price |
|------------|--|--------|--------|---------|---------|----------|----------|--------|-------|
| PDCSPA12   | Adaptec® 29320LPE, Single Channel SCSI Controller, PCI-e | ✓      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £173  |

### Adaptec Zero-Maintenance Cache Protection RAID Controller Cards

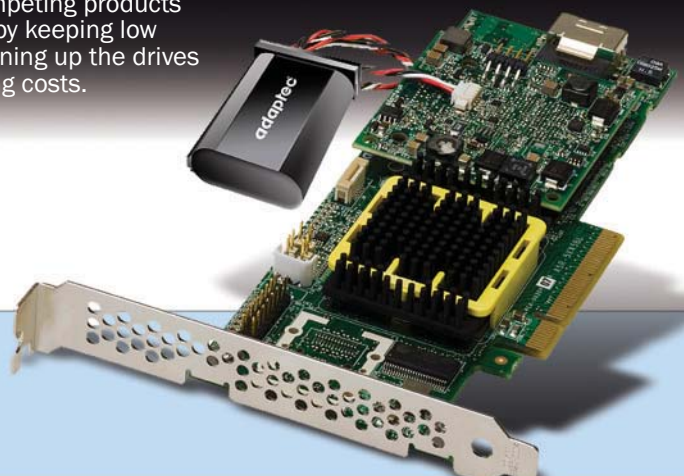
| Order Code | Description  | IX1100 | IX2100 | IX2300R | IX2600R | IX2320RS | IX2620RS | IX4600 | Price |
|------------|--|--------|--------|---------|---------|----------|----------|--------|-------|
| PDCR540Z   | Adaptec® 5405Z RAID Controller 4 port internal, PCIe, LP, 512MB        | ✓      | ✓      | ✓       | ✓       | -        | -        | ✓      | £520  |
| PDCR580Z   | Adaptec® 5805Z RAID Controller 8 port internal, PCIe, LP, 512MB        | -      | ✓      | -       | ✓       | -        | -        | ✓      | £615  |
| PDCR544Z   | Adaptec® 5445Z RAID Controller 4 port int, 4 port ext, PCIe, LP, 512MB | ✓      | ✓      | ✓       | ✓       | -        | -        | ✓      | £620  |

# adaptec®

## The foundation of better storage solutions

### Adaptec Series 5Z Unified Serial® RAID Controller Family

Built upon the same high-performance architecture as the Adaptec Series 5 family of Unified Serial® (SATA/SAS) RAID controllers, Adaptec RAID Series 5Z introduces Zero-Maintenance Cache Protection – instant flash-based cache protection that can save data centres thousands of dollars in operating costs by eliminating expensive battery installation, monitoring, replacement and disposal. ZMCP provides cache protection within minutes of installation and preserves full data integrity for up to 10 years. Adaptec Series 5Z controllers are up to 5X faster than competing products and complement Adaptec Intelligent Power Management by keeping low levels of I/O activity in the controller cache instead of spinning up the drives – providing up to 70% savings in storage power and cooling costs.



For more information, please contact us

Tel: 01727 201 860

Email: sales@viglen.co.uk



# Network Connectivity for the Data Centre

Unparalleled manageability, reliability, performance and ease of deployment - 8Gb/s LightPulse™ Fibre Channel Host Bus Adapters from Emulex

- Highest Scalability
- Greatest Reliability
- Superior Performance
- Enhanced Security
- Unparalleled Interoperability
- Simplified Management with OneCommand™



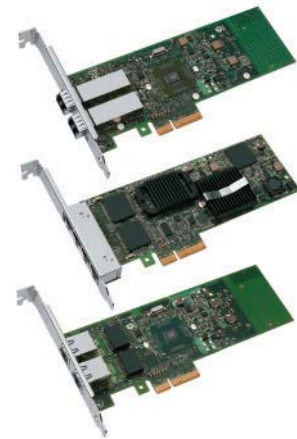
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## Network Interface Cards

### Intel® Gigabit ET Server Adapters: reliable performance, optimised for virtualisation

Built with the Intel® 82576 Gigabit Ethernet Controller, the new Intel® Gigabit ET Server Adapters showcase the next evolution in GbE networking features for the enterprise network and data center. Features include security, support for multi-core processors, and optimisation for server virtualisation. This quad-port copper adapter is capable of 100m transmissions on CAT5e cable.

- High-performing, 10/100/1000 Ethernet connection
- Reliable and proven Gigabit Ethernet technology from Intel Corporation
- Scalable PCI Express interface provides dedicated I/O bandwidth for I/O-intensive networking applications
- Optimised for virtualised environments
- Flexibility with iSCSI Boot and choice of dual- and quad-port adapters in both fibre and copper



| Order Code |   | IX1100 | IX2100 | IX2300R | IX2600R | IX2320RS | IX2620RS | IX4600 | Price  |
|------------|---|--------|--------|---------|---------|----------|----------|--------|--------|
| CNCEP10M   | IX Server Dual Gb E I/O Expansion Module (Can only have single module per server)     | -      | -      | ✓       | ✓       | ✓        | ✓        | -      | £105   |
| CNCEP40M   | IX Server Quad port GbE I/O Expansion Module (Can only have single module per server) | -      | -      | ✓       | ✓       | ✓        | ✓        | -      | £348   |
| CNCEP2ET   | Intel® Gigabit ET Dual Port Adaptor PCIe (1000Base-T Copper RJ45)                     | ✓      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £120   |
| CNCEP4ET   | Intel® Gigabit ET Quad Port Server Adapter PCIe (1000Base-T Copper RJ45)              | ✓      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £295   |
| CNCEX521   | Intel® Ethernet Server Adapter X520-SR1, Single LC port, 10GBase-SR, PCI-E            | -      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £799   |
| CNCEX521   | Intel® Ethernet Server Adapter X520-SR2, Dual LC ports, 10GBase-SR, PCI-E             | -      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £1,016 |
| CNCEX52L   | Intel® Ethernet Server Adapter X520-LR1, Single LC port, 10GBase-LR, PCI-E            | -      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £1,016 |
| CNCEX52D   | Intel® Ethernet Server Adapter X520-DA2, Dual port direct attach, PCI-E               | -      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £580   |
| CNCEX5SS   | Intel® Ethernet SFP+ Optics SR supports X520-DA2                                      | -      | -      | -       | -       | -        | -        | -      | £220   |
| CNCEX5SR   | Intel® Ethernet SFP+ Optics LR supports X520-DA2                                      | -      | -      | -       | -       | -        | -        | -      | £435   |

Data is almost certainly the most valuable asset that you have today, and therefore making sure that this data is safe should be one of your highest priorities. To help you achieve this, Viglen offers a range of tape drives from the best manufacturers in the world. Pricing below is for internal backup drives, although most are also available as external units. Where we provide two capacity figures, the first number is native capacity, the second is the maximum achievable with compression (in Gigabytes). We also offer a full range of autoloaders and tape libraries. The Viglen Storage Group can advise on the right technology and practice for your backup strategy.

| Backup Options |   | IX1100 | IX2100 | IX2300R | IX2600R | IX2320RS | IX2620RS | IX4600 | Price  |
|----------------|---|--------|--------|---------|---------|----------|----------|--------|--------|
| DTDFNRD1       | Tandberg RDX Internal drive, black, SATA interface and Includes AccuGuard Single Server Edition | ✓      | ✓      | -       | ✓       | -        | ✓        | ✓      | £95    |
| DTDFNR1U       | Tandberg RDX Internal drive, black, USB interface and Includes AccuGuard Single Server Edition  | ✓      | ✓      | -       | -       | -        | -        | ✓      | £95    |
| DTDFNRE1       | Tandberg RDX External drive, black, USB, Cartridge and Includes AccuGuard Single Server Edition | ✓      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £105   |
| DTDTLTA2       | Tandberg LTO-2 200GB/400GB, HH - Internal drive, black, SAS                                     | ✓      | ✓      | -       | -       | -        | -        | ✓      | £685   |
| DTDTL3A1       | Tandberg LTO-3 400GB/800GB, HH - Internal drive, black, SAS                                     | ✓      | ✓      | -       | -       | -        | -        | ✓      | £856   |
| DTDTL3SE       | Tandberg LTO-3 400GB/800GB, HH - External drive, black, SCSI                                    | ✓      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £1,041 |
| DTDTL4S1       | Tandberg LTO-4, 800GB/1.6TB, HH - Internal drive, black, SCSI                                   | ✓      | ✓      | -       | -       | -        | -        | ✓      | £1,329 |
| DTDTL4A1       | Tandberg LTO-4, 800GB/1.6TB, HH - Internal drive, black, SAS                                    | ✓      | ✓      | -       | -       | -        | -        | ✓      | £1,262 |
| DTDTL4SE       | Tandberg LTO-4, 800GB/1.6TB, HH - External drive, black, SCSI                                   | ✓      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £1,487 |
| DTDTL5A1       | Tandberg LTO-5, 1.5TB/3.0TB HH - Internal drive, black, SAS                                     | ✓      | ✓      | -       | -       | -        | -        | ✓      | £2,043 |
| DTDTL5AE       | Tandberg LTO-5, 1.5TB/3.0TB, HH - External drive, black, SAS                                    | ✓      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £2,216 |
| DTDLSL42       | Tandberg StorageLibrary T24, 12 Slots, LTO-4 HH SAS, 9.6TB/ 19.2TB                              | -      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £2,928 |
| DTDLSL43       | Tandberg StorageLibrary T24, 24 Slots, LTO-4 HH SAS, 19.2TB/ 38.4TB                             | -      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £3,334 |
| DTDLSL52       | Tandberg StorageLibrary T24, 12 Slots, LTO-5 HH SAS, 18TB/ 36TB                                 | -      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £3,798 |
| DTDLSL53       | Tandberg StorageLibrary T24, 24 Slots, LTO-5 HH SAS, 36TB/ 72TB                                 | -      | ✓      | ✓       | ✓       | ✓        | ✓        | ✓      | £4,324 |

| Order Code                  |  | Price |
|-----------------------------|--|-------|
| <b>Backup Media Options</b> |  |       |
| PASMR160                    | Tandberg RDX 160GB Cartridge                   | £82   |
| PASMR320                    | Tandberg RDX 320GB Cartridge                   | £116  |
| PASMR500                    | Tandberg RDX 500GB Cartridge                   | £162  |
| PASMR640                    | Tandberg RDX 640GB Cartridge                   | £205  |
| PASMR10T                    | Tandberg RDX 1TB Cartridge                     | £281  |
| PASM1LTT                    | Tandberg LTO-1 100GB/200GB Data Tape Cartridge | £23   |
| PASM2LTT                    | Tandberg LTO-2 200GB/400GB Data Tape Cartridge | £22   |
| PASM3LTT                    | Tandberg LTO-3 400GB/800GB Data Tape Cartridge | £23   |
| PASM4LTT                    | Tandberg LTO-4 800GB/1.6TB Data Tape Cartridge | £38   |
| PASM5LTT                    | Tandberg LTO-5 1.5TB/3.0TB Data Tape Cartridge | £70   |
| PASMLTOC                    | Universal LTO Tape Cleaning Cartridge          | £39   |

## Smarter Storage for Smarter Businesses

**TANDBERG DATA**   
Securing your Information

Tandberg Data is a leading global supplier of data protection solutions. Tandberg Data offers a wide selection of secondary storage solutions, ranging from disk-based appliances, such as the RDX® QuikStor™, Tandberg DPS2000 NAS™ and the AccuVault, to automated tape solutions like the StorageLoader and StorageLibrary Series.

Tandberg Data backup and data protection solutions are designed to meet the growing storage requirements of small to medium businesses with scalability, reliability, performance and security features that ensure cost effective operation and long-term investment

All solutions are supported through a worldwide service and support network, recognised globally for its outstanding levels of service. In addition to the standard warranty and support offerings, on-site service upgrades provide Tandberg Data customers with further peace of mind.

[www.tandbergdata.com/emea](http://www.tandbergdata.com/emea)



LTO-5 Tape Drives Now Available



Cartridge capacities from 160GB to 1TB



LTO-5 Automation Solutions Now Available

Viglen offer Enterprise SATA and SAS to meet your disk storage requirements in 3.5" and 2.5" Small Form Factor variations. For larger capacities without compromising enterprise performance and achieving a cost effective solution choose SATA. If you are looking for enterprise performance and reliability choose SAS with speeds of up to 15,000 RPM for rapid data access.

## Enterprise SATA Hard Disk Drives

| Order Code | Description  | IX1100 | IX2100 | IX2300R | IX2600R | IX2320RS | IX2620RS | IX4600 | Price |
|------------|--|--------|--------|---------|---------|----------|----------|--------|-------|
| DHDEA25R   | Western Digital RAID Edition 250GB 3.5" Form Factor 7,200RPM SATA HDD                    | ✓      | ✓      | ✓       | ✓       | -        | -        | ✓      | £46   |
| DHDEA32R   | Western Digital RAID Edition 320GB 3.5" Form Factor 7,200RPM SATA HDD                    | ✓      | ✓      | ✓       | ✓       | -        | -        | ✓      | £54   |
| DHDA050R   | Western Digital RAID Edition 500GB 3.5" Form Factor 7,200RPM SATA HDD                    | ✓      | ✓      | ✓       | ✓       | -        | -        | ✓      | £59   |
| DHDA75R3   | Western Digital RAID Edition 750GB 3.5" Form Factor 7,200RPM SATA HDD                    | ✓      | ✓      | ✓       | ✓       | -        | -        | ✓      | £83   |
| DHDE01R3   | Western Digital RAID Edition 1.0TB 3.5" Form Factor 7,200RPM SATA HDD                    | ✓      | ✓      | ✓       | ✓       | -        | -        | ✓      | £97   |
| DHDE02R4   | Western Digital RAID Edition 2.0TB 3.5" Form Factor 7,200RPM SATA HDD                    | ✓      | ✓      | ✓       | ✓       | -        | -        | ✓      | £234  |
| DHDE020G   | Western Digital RAID Edition Green Power 2.0TB, 3.5" Form Factor SATA HDD                | ✓      | ✓      | ✓       | ✓       | -        | -        | ✓      | £208  |
| DHDBB15V   | Western Digital VelociRaptor 150GB 3.5" Form Factor 10,000RPM SATA HDD (backplane-ready) | ✓      | ✓      | ✓       | ✓       | -        | -        | ✓      | £125  |
| DHDBB30V   | Western Digital VelociRaptor 300GB 3.5" Form Factor 10,000RPM SATA HDD (backplane-ready) | ✓      | ✓      | ✓       | ✓       | -        | -        | ✓      | £169  |
| DHDBB45V   | Western Digital VelociRaptor 450GB 3.5" Form Factor 10,000RPM SATA HDD (backplane-ready) | ✓      | ✓      | ✓       | ✓       | -        | -        | ✓      | £204  |
| DHDBB60V   | Western Digital VelociRaptor 600GB 3.5" Form Factor 10,000RPM SATA HDD (backplane-ready) | ✓      | ✓      | ✓       | ✓       | -        | -        | ✓      | £222  |
| DHDB015V   | Western Digital VelociRaptor 150GB 2.5" Small form factor 10,000RPM SATA HDD             | -      | -      | -       | -       | ✓        | ✓        | -      | £129  |
| DHDB030V   | Western Digital VelociRaptor 300GB 2.5" Small form factor 10,000RPM SATA HDD             | -      | -      | -       | -       | ✓        | ✓        | -      | £169  |
| DHDB045V   | Western Digital VelociRaptor 450GB 2.5" Small form factor 10,000RPM SATA HDD             | -      | -      | -       | -       | ✓        | ✓        | -      | £195  |
| DHDB060V   | Western Digital VelociRaptor 600GB 2.5" Small form factor 10,000RPM SATA HDD             | -      | -      | -       | -       | ✓        | ✓        | -      | £213  |

## Enterprise SAS Hard Disk Drives

|          |   |   |   |   |   |   |   |   |      |
|----------|---|---|---|---|---|---|---|---|------|
| DHDS5735 | Fujitsu 73.5GB 3.5" Form factor SAS 15,000 RPM HDD      | ✓ | ✓ | ✓ | ✓ | - | - | ✓ | £118 |
| DHDS5147 | Fujitsu 147GB 3.5" Form factor SAS 15,000 RPM HDD       | ✓ | ✓ | ✓ | ✓ | - | - | ✓ | £127 |
| DHDS5300 | Fujitsu 300GB 3.5" Form factor SAS 15,000 RPM HDD       | ✓ | ✓ | ✓ | ✓ | - | - | ✓ | £196 |
| DHDS414B | Fujitsu 147GB 2.5" Small form factor SAS 10,000RPM HDD  | - | - | - | - | ✓ | ✓ | - | £118 |
| DHDS4300 | Fujitsu 300GB 2.5" Small form factor SAS 10,000RPM HDD  | - | - | - | - | ✓ | ✓ | - | £196 |
| DHDS4450 | Fujitsu 450GB 2.5" Small form factor SAS 10,000RPM HDD  | - | - | - | - | ✓ | ✓ | - | £239 |
| DHDS4600 | Fujitsu 600GB 2.5" Small form factor SAS 10,000RPM HDD  | - | - | - | - | ✓ | ✓ | - | £337 |
| DHDS473C | Fujitsu 73.5GB 2.5" Small form factor SAS 15,000RPM HDD | - | - | - | - | ✓ | ✓ | - | £145 |
| DHDS414C | Fujitsu 147GB 2.5" Small form factor SAS 15,000RPM HDD  | - | - | - | - | ✓ | ✓ | - | £174 |

## Solid State Drives

The Intel® Extreme SATA Solid-State Drive offers outstanding performance and reliability, delivering the highest IOPS per watt for servers and storage. There are no rotating platters, moving heads, unnecessary spin up time or positional seek time that can slow down storage. These Intel drives also feature low write amplification and a unique wear-leveling design for higher reliability, meaning Intel drives not only perform better – they last longer.

| Order Code | Description  | IX1100 | IX2100 | IX2300R | IX2600R | IX2320RS | IX2620RS | IX4600 | Price |
|------------|--|--------|--------|---------|---------|----------|----------|--------|-------|
| DSDA0041   | Intel X25-V 40GB 2.5" Small form factor SATA SSD     | -      | -      | -       | -       | ✓        | ✓        | -      | £96   |
| DSDB0082   | Intel X25-M 80GB G2 2.5" Small form factor SATA SSD  | -      | -      | -       | -       | ✓        | ✓        | -      | £182  |
| DSDB0162   | Intel X25-M 160GB G2 2.5" Small form factor SATA SSD | -      | -      | -       | -       | ✓        | ✓        | -      | £364  |
| DSDA0031   | Intel X25-E 32GB 2.5" Small form factor SATA SSD     | -      | -      | -       | -       | ✓        | ✓        | -      | £304  |
| DSDA0061   | Intel X25-E 64GB 2.5" Small form factor SATA SSD     | -      | -      | -       | -       | ✓        | ✓        | -      | £581  |

## Viglen VigStor SAS JBOD Enclosure Range

The Viglen VigStor SAS JBOD enclosures allow you to seamlessly expand your existing server-based storage, by attaching to the external 4-lane SAS port on your server. Support for both Enterprise Class SATA and SAS Hard Disks and a range of solutions for both 2.5" and 3.5" disks in 1U, 2U or 3U form factors, offers the flexibility to allow you to match your storage expansion to your capacity, performance and space requirements. Redundant power and redundant I/O module options ensure maximum availability for critical data. Massive scalability can be achieved by Daisy-Chaining VigStor JBODs together.

| Order Code | Description   | Price  |
|------------|---|--------|
| PSXJB122   | Viglen Vigstor VS1220 2U, SATA/ SAS, 2.5" 24 bay, Dual 350W PSU     | £1,728 |
| PSXJBS2A   | Viglen VigStor VS1220 Additional SAS Expander Module for Redundancy | £425   |
| PSXJB212   | Viglen Vigstor VS1230 2U, SATA/ SAS, 3.5" 12 bay, Dual 460W PSU     | £1,485 |
| PSXJBS2E   | Viglen Vigstor VS1230 Expander Module for Redundancy                | £341   |
| PSXJBS213  | Viglen Vigstor VS1330 3U, SATA/ SAS, 3.5" 16 bay, Dual 460W PSU     | £1,606 |
| PSXJBS3E   | Viglen VigStor VS1330 Additional SAS Expander Module for Redundancy | £379   |
| PSXSASML   | External SAS Multilane Cable - 2x SFF-8088, 0.5m                    | £35    |
| PSXSASM2   | External SAS Multilane Cable - SFF-8470 to SFF-8088, 0.5m           | £32    |
| PSXJBFSR   | Friction Slider Rails for VS1230 and VS1330 JBODs                   | £43    |

### V-Stor VS1230

- 2U Form Factor
- 12, 3.5" Drive Bays for Enterprise SATA or SAS Hard Disks



### V-Stor VS1330

- 3U Form Factor
- 16, 3.5" Drive Bays for Enterprise SATA or SAS Hard Disks



# The Smart-UPS closet solution: managed, secured, cooled

**Need to get out of the closet – but still keep an eye on your network?** Bet you never thought you'd end up with so many closets to look after. And as they've grown in number, they've also grown in complexity, adding to the risk – and the high cost – of downtime.

The availability of those closets is critical, but whether your network is converged, in multiple locations, or housed out of sight and out of mind, you can't be in ten places at once, making sure they're all secure and running smoothly.

Fortunately, APC has engineered an integrated solution that starts with new Smart-UPS XL – the Smart-UPS you already know and trust, made even smarter with integrated management and security-enabled features. Your view into the network closet has never been clearer, with automatic alerts of power events, security threats, or thermal incidents that put your critical availability at risk.

If you're converging your network or just need an extra pair of eyes, start with APC Smart-UPS XL: the foundation for highly available, secure, cooled, managed networks.



APC's Smart-UPS and Symmetra lines are certified Cisco Compatible, integrate with Cisco CallManager version 4.x and Cisco Unity Express, and provide graceful unattended shutdown in the event of an extended power outage.

Compatibility certifications with the industry's top IP Telephony Vendors; Cisco, Avaya, and Nortel.

Smart-UPS XL  
NEW! APC Smart-UPS XL Modular  
3000VA 230V Rackmount/Tower

## Network management-enabled UPS

### Smart-UPS XL

Performance power protection with runtime for servers, and voice and data networks.

- included PowerChute management software
- intelligent battery management
- hot-swappable batteries, scalable runtime
- modular; tower or rack mount, hardware included



## Management upgrades

### PowerChute Business Edition

upgrades available

Reliable network-based shutdown of multiple servers.

Included with Smart-UPS.

- application shutdown support
- battery capacity indicator
- e-mail notification



### InfraStruxure Central

Provides an efficient way for organisations to manage their company-wide physical infrastructure devices.

- real-time device monitoring
- custom reporting capabilities
- advanced security
- instant event notification



## Security

### NetBotz Security and Environmental

Protecting IT assets from physical and environmental threats.

- visual monitoring of all activities in the data centre or wiring closet
- third-party monitoring via dry-contacts, SNMP, IPMI, 0–5V, and 4–20mA
- user-configurable alarm and escalation policies
- temperature, humidity, and leak detection



## Cooling

### Wiring Closet Ventilation Unit

(Up to 3kW of heat removal) Rapidly deployable wall- or ceiling-mounted heat removal system for wiring closets.



### InfraStruxure InRow SC

(Up to 7kW) Rapidly deployable, in-row air conditioning for server rooms and wiring closets.

- eliminates hot air mixing; maximises cooling efficiency
- network manageable
- real-time capacity monitoring
- modular, scalable



**APC**  
by Schneider Electric



For more information about APC solutions,  
please contact us

Email: sales@viglen.co.uk  
Tel: 01727 201 860

APC Keycode 81860T

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\*Full details are available online. 998-0846\_Softcat\_UK

Every server should be connected to an Uninterruptible Power Supply (UPS). The easiest way to corrupt individual files - or entire file systems - is to flick the power off. A UPS, with its battery and power conditioning circuitry will protect your server from power failure. If a power cut lasts beyond the life of the battery, the UPS will initiate a 'graceful' shutdown, preventing file corruption and allowing for a rapid restart when power is restored.



## Uninterruptible Power Supplies (UPS)

| Order Code | Description  | Price  |
|------------|--|--------|
| PPUPM075   | APC Smart-UPS 750VA LCD (500 Watts) Pedestal       | £203   |
| PPUPM100   | APC Smart-UPS 1000VA LCD (670 Watts) Pedestal      | £292   |
| PPUPM150   | APC Smart-UPS 1500VA LCD (980 Watts) Pedestal      | £406   |
| PPUPM221   | APC Smart-UPS 2200VA LCD (1600 Watts) Pedestal     | £576   |
| PPUPM301   | APC Smart-UPS 3000VA LCD (2700 Watts) Pedestal     | £380   |
| PPUPS71R   | APC Smart-UPS 750 (480 Watts) 1U Rackmount         | £340   |
| PPUPS72R   | APC Smart-UPS 750 (480 Watts) 2U Rackmount         | £298   |
| PPUPS11R   | APC Smart-UPS 1000 (640Watts) 1U Rackmount         | £460   |
| PPUPS1R2   | APC Smart-UPS 1000 (670 Watts) 2U Rackmount        | £395   |
| PPUPS15R   | APC Smart-UPS 1500 (980 Watts) 2U Rackmount        | £505   |
| PPUPS23R   | APC Smart-UPS 2200 (1980 Watts) 2U Rackmount       | £835   |
| PPUPS32R   | APC Smart-UPS 3000 (2250 Watts) 5U Rackmount       | £1,070 |
| PPUPS2XL   | APC Smart-UPS XL 2200 (1980 Watts) 3U Rackmount    | £1,095 |
| PPUPS3XL   | APC Smart-UPS XL 3000VA (2700Watts) Pedestal       | £1,035 |
| PPUPS3XR   | APC Smart-UPS XL 3000VA (2700 Watts) 3U Rack Mount | £1,265 |

## UPS Accessories

|          |   |      |
|----------|---|------|
| PPUPSMC8 | APC UPS Network Management Card 2                               | £178 |
| PPUPSMC2 | APC SmartSlot Environmental Monitoring Card                     | £136 |
| PPUPSMC5 | APC UPS Network Management Card 2 with Environmental Monitoring | £285 |

## Racks

|          |  |        |
|----------|--|--------|
| PARA2900 | NetShelter VL 42U 600mm Wide x 1070mm Deep Enclosure | £617   |
| PARA3104 | NetShelter SX 24U 600mm Wide x 1070mm Deep Enclosure | £695   |
| PARA3100 | NetShelter SX 42U 600mm Wide x 1070mm Deep Enclosure | £827   |
| PARA3107 | NetShelter SX 48U 600mm Wide x 1070mm Deep Enclosure | £979   |
| PARA3150 | NetShelter SX 42U 750mm Wide x 1070mm Deep Enclosure | £1,011 |
| PARA3157 | NetShelter SX 48U 750mm Wide x 1070mm Deep Enclosure | £1,218 |
| PARA3300 | NetShelter SX 42U 600mm Wide x 1200mm Deep Enclosure | £1,075 |
| PARA3307 | NetShelter SX 48U 600mm Wide x 1200mm Deep Enclosure | £1,282 |
| PARA3350 | NetShelter SX 42U 750mm Wide x 1200mm Deep Enclosure | £1,370 |
| PARA3357 | NetShelter SX 48U 750mm Wide x 1200mm Deep Enclosure | £1,578 |

**APC are the market leaders in UPS. Please contact your Viglen Account Manager for other APC products and DataCentre products.**

## Viglen Server Rack Cabinets

Viglen have partnered with Knurr to develop and produce a versatile, high-grade server rack range that can be tailored to your needs. Our rack cabinets have a unique aluminium extrusion, sturdy weight bearing (with strengthening options up to 1500KG), simple baying installation via full height flushed kits and clever cable management with velcro cable trays.

- Available heights 42U and 27U
- Available depths 1000mm and 1200mm
- Available widths 600mm and 800mm
- Fully assembled aluminium extruded frame.
- Multi-vendor equipment compatibility
- Protective grounding provisions
- 85% perforation level increasing airflow circulation
- Sturdy 500KG Weight Bearing with strengthening options up to 1500KG

### A Standard Server Rack Comprises of:

- 'U' height marker strips on front and rear
- 2x Side panels
- Front bowed mesh door
- Rear mesh door
- Top cover
- Velcro cable trays

APC Keycode 81860T



## Aten LCD Console trays

| Order Code | Description   | Price |
|------------|---|-------|
| PXKMT10M   | Aten 1U Integrated 17" LCD Console full keyboard and touchpad mouse - PS2                   | £527  |
| PXKMT580   | Aten 1U Integrated 19" Dual Rail LCD Console full keyboard and touchpad mouse - PS2 and USB | £740  |

## Aten LCD Console with switches

|          |  |        |
|----------|--|--------|
| PXKMT508 | Aten 1U 17" LCD Console with 8 Port KVM Switch including 8x 1.8m PS2 cables              | £787   |
| PXKMT516 | Aten 1U 17" LCD Console with 16 Port KVM Switch including 16x 1.8m PS2 cables            | £997   |
| PXKMTK16 | Aten 1U 17" Dual Rail LCD Console with 16 Port KVMP Switch including 16x 1.8m PS2 cables | £1,688 |
| PXKMT508 | Aten 1U 17" LCD Console with 8 Port KVM Switch including 8x 1.8m USB Cables              | £798   |
| PXKMT516 | Aten 1U 17" LCD Console with 16 Port KVM Switch including 16x 1.8m USB Cables            | £1,014 |
| PXKMTK16 | Aten 1U 17" Dual Rail LCD Console with 16 Port KVMP Switch including 16x 1.8m USB Cables | £1,689 |

## Aten KVM Switches

|          |  |      |
|----------|--|------|
| PXKMT781 | Aten 1U 8 Port KVM with NET access port inc 8x 1.8M USB Cables   | £462 |
| PXKMT761 | Aten 1U 16 Port KVM with NET access port inc 16x 1.8M USB Cables | £638 |

## Server Management

### Viglen Server Management Tools

All Viglen IX Servers ship with Intel® System Management Software, a suite of software tools that simplifies IT management. This powerful set of applications is capable of managing the entire IT environment from small to medium size businesses. It is designed to ease management of the entire IT environment through a single unified console. Included with this powerful set of applications are the Intel® Management Packs which integrate seamlessly into Microsoft® System Center Essentials 2007 or Microsoft System Center Operations Manager. Essentials 2007 is designed to specifically address IT management with up to 30 servers and 500 clients. The Essentials 2007 console provides expert knowledge for solving problems, tools for streamlining daily activities and reporting that help IT staff efficiently monitor and maintain network health and security.

#### Intel® Deployment Assistant



The Intel® Deployment Assistant reduces the complexity and time associated with setting up Viglen servers. Server deployment time is often cut by an hour or more per system, and even more time can be saved when using the cloning feature to deploy identical servers. The wizard automatically locates and retrieves the latest drivers, BIOS, and firmware updates. It steps through questions allowing the user to quickly configure the server via automatic recognition of server hardware, minimal reboots, and an automated unattended OS installation.

#### Intel® Active System Console



The Intel® Active System Console is a web based lightweight walkup console for customers who do not need all the features and functionality of System Center Essentials. This console will provide basic monitoring capabilities including server health and BMC configuration. If for any reason your server hardware should experience a warning or critical event, the application will send you an immediate e-mail and provide an event viewer with a full explanation of the problem.

#### Intel® Remote Management Module 3



Streamline your Viglen servers administration by adding the Intel Remote Management Module option enabling advanced management features such as remote access and management control for Viglen Servers providing drive redirection and KVM over IP to facilitate remote operation and repair.

At Viglen we understand that your investment is critical, so we've improved our server warranty cover. Viglen are now offering longer periods, rapid responses, and balanced value added services. We're certain our experienced, professional services team will bridge the gap between your in-house resources and your support expectations. Viglen operates a strong and effective support infrastructure which has developed into a proactive knowledge sharing service. Our ISO/IEC 20000 certification, demonstrates our commitment to IT service quality, giving IT Managers the peace of mind that they are covered with a solid foundation of services.

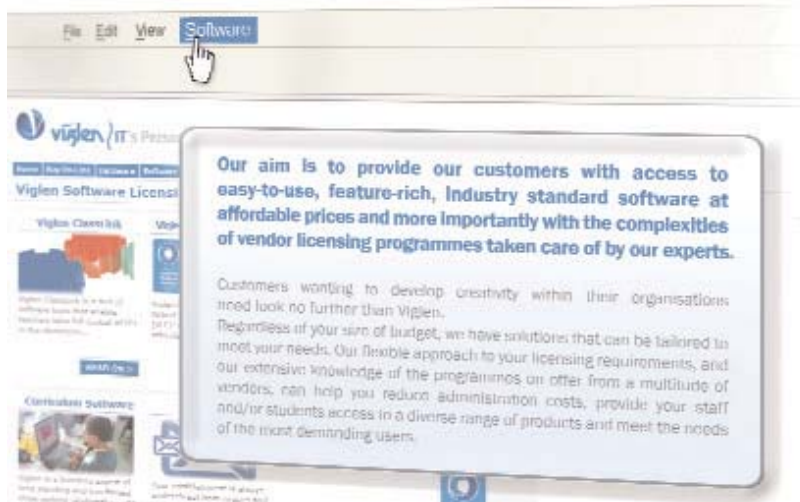
| Warranty options                      | Level 1<br>(Basic cover)<br>For systems with less stringent support needs requiring coverage during normal working hours. | Level 2<br>(Assured cover)<br>A balanced support service adding extended availability, with a swift response. | Level 3<br>(Guardian cover)<br>For more critical environments our engineers are ready 24 hours, 7 days a week and 365 days a year. |         |                   |         |         |                   |         |  |
|---------------------------------------|---|---|--|---------|-------------------|---------|---------|-------------------|---------|--|
| Onsite Engineer                       | ✓   | ✓   | ✓  |         |                   |         |         |                   |         |  |
| Remote Access Assistance              | X   | ✓   | ✓  |         |                   |         |         |                   |         |  |
| Online Incident Logging               | X   | ✓   | ✓  |         |                   |         |         |                   |         |  |
| Dedicated Support Number              | X   | ✓   | ✓  |         |                   |         |         |                   |         |  |
| Active Server Monitoring <sup>2</sup> | X   | X   | ✓  |         |                   |         |         |                   |         |  |
| <b>Availability</b>                   | <b>09:00 - 17:30 Mon to Fri</b>   | <b>08:00 - 18:00 Mon to Fri</b>   | <b>24 X 7<sup>3</sup></b>  |         |                   |         |         |                   |         |  |
| <b>Response</b>                       | <b>Next Business Day<sup>1</sup></b>  | <b>4 Hour<sup>1</sup></b>   | <b>4 Hour</b>  |         |                   |         |         |                   |         |  |
|                                       | <b>Base</b>   | <b>Upgrade to</b>   |  |         | <b>Upgrade to</b> |         |         | <b>Upgrade to</b> |         |  |
|                                       | 3 Years   | 4 Years   | 5 Years  | 3 Years | 4 Years           | 5 Years | 3 Years | 4 Years           | 5 Years |  |
| Entry                                 | Basic Warranty included   | £71   | £176   | £245    | £349              | £522    | £366    | £522              | £782    |  |
| Workgroup                             |   | £177  | £419   | £419    | £696              | £1043   | £627    | £1,043            | £1,562  |  |
| Departmental                          |   | £317  | £664   | £698    | £1,252            | £1875   | £1,044  | £1,875            | £2,810  |  |
| Vigstor JBODs                         |   | £177  | £426   | £426    | £711              | £1,066  | £640    | £1,066            | £1,600  |  |

1. Excluding bank holidays.

2. Active Server monitoring is subject to server configuration and requires purchase of a remote management device

3. Subject to geographical area.

## viglen IT's Software



To find out more about our Software licensing solutions please contact us on

Tel: 01727 201 890

Email: [softwarelicensing@viglen.co.uk](mailto:softwarelicensing@viglen.co.uk)



Viglen designs, plans and installs networking solution, using technologies which deliver the most cost-effective and efficient networking to underpin your organisational needs. Our flexible approach to IT infrastructure allows for organic growth, nurturing new technology and embracing your legacy equipment, enabling you to make the best use of your IT budget.

## Viglen Partners with HP Networking



HP is raising the bar through innovation to deliver a differentiated portfolio of edge to core and data center networking solutions, complemented by global service and support capabilities. Combining 3Com, H3C, TippingPoint and HP networking and security solutions, HP is creating a global networking powerhouse that enables a simplified, more flexible fabric.

This expanded portfolio delivers best-in-class solutions that enable clients to harness the power of convergence and accelerate business growth at a lower total cost of ownership. Explore the benefits to your business today.

### A-Series

For customers with large or complex deployments seeking advanced technology to drive competitive advantage through their IT infrastructure at a lower cost of ownership. The A-Series is built on robust networking products from the H3C division of 3Com.

### E-Series

For customers seeking essential and proven technology to reach their business goals with future proof, easy-to-use, affordable, secure and reliable networking. The E-Series combines industry-leading switching and routing products from ProCurve and 3Com.

### V-Series

For value-conscious customers in small office environments seeking reliable and easy-to-use connectivity solutions. The V-Series combines networking solutions from ProCurve and 3Com that set the bar in these environments

### S-Series

Security for customers that require dynamic, intelligent and immediate protection by proactively stopping network threats while ensuring business continuity. The S-Series is built on strong security solutions from TippingPoint.



HP ProCurve Access



HP Pro Curve Switch  
8200zl Series



Switch 2520 Series

### Viglen's Networking Solution partners include:



## Wireless

Viglen can plan, configure, deploy enterprise-class managed wireless solutions that allow high-performance, secure, reliable wireless LANs for untethered network and Internet access when and where you need it.

### What Viglen can do for you:

#### Site Survey

We will undertake a site survey to determine things like the exact placement of Wireless Access Points and/or VOIP handsets throughout the building. To ensure we fully understand your current environment for your solution.

#### Device testing

We ensure that laptops and other equipment to be used on the wireless network are fully tested and where needed adjust images or install and configure any wireless client software that is required.

## VOIP Solutions

Viglen have a track record of delivering successful converged technology solutions to schools, colleges and commercial organisations. If you are looking to integrate voice into your data network, want to ensure the products used today will deliver VoIP tomorrow or simply want to discuss the benefits that technology can bring to your organisation, please give Viglen a call.

#### Quality of service

We can tailor wireless traffic to ensure that important services are prioritised such as voice and video.

#### Performance Checks

After go-live, Viglen will come back to do performance analysis to ensure you are getting the best performance and experience

## Firewalls from WatchGuard

The WatchGuard® XTM family of security appliances delivers the industry's best combination of strong security, reliability and performance - all at a compelling price point. IT administrators have granular controls to manage the network, with unprecedented visibility into network activity. Continually updated security subscriptions boost protection in critical attack areas to block spam, spyware, web-based exploits and blended threats for comprehensive defences.

### Why should I go with a bundle?

From initial purchase and setup through ongoing security management, the Bundle makes network security management easier and more efficient.

### Getting everything you need in one package means:

- Cutting overhead by saying goodbye to multiple POs, multiple policies, multiple configurations and working with multiple vendors
- One license key turns on the firewall and all security subscriptions
- One support contract covers all aspects of your network security profile
- A great value! The best reason of all - the Bundle delivers significant savings.

### WatchGuard XTM 2 Series

|          |   |        |
|----------|---|--------|
| ENFWX231 | WatchGuard XTM 23 Security Bundle - 1 Year          | £735   |
| ENFWX333 | WatchGuard XTM 23 Security Bundle - 3 Year          | £1,177 |
| ENFWW231 | WatchGuard XTM 23 Wireless Security Bundle - 1 Year | £832   |
| ENFWW232 | WatchGuard XTM 23 Wireless Security Bundle - 2 Year | £1,122 |
| ENFWW233 | WatchGuard XTM 23 Wireless Security Bundle - 3 Year | £1,335 |

### WatchGuard XTM 5 Series

|          |   |        |
|----------|---|--------|
| ENFWX511 | WatchGuard XTM 510 Security Bundle - 1 Year | £1,949 |
| ENFWX513 | WatchGuard XTM 510 Security Bundle - 3 Year | £3,123 |
| ENFWFP51 | Upgrade to XTM Pro for 510                  | £290   |
| ENFWX531 | WatchGuard XTM 530 Security Bundle - 1 Year | £4,784 |
| ENFWX533 | WatchGuard XTM 530 Security Bundle - 3 Year | £7,664 |
| ENFWFP53 | Upgrade to XTM Pro for 530                  | £711   |

### WatchGuard XTM 8 Series

|          |   |         |
|----------|---|---------|
| ENFWX811 | WatchGuard XTM 810 Security Bundle - 1 Year with XTM Pro included | £7,988  |
| ENFWX813 | WatchGuard XTM 810 Security Bundle - 3 Year with XTM Pro included | £12,792 |



## Whatever your needs, our Professional Services can be tailored to them



### Technical consultants

If your organisation is looking to deploy a large scale project, Viglen's technical consultants can offer their expertise and experience to plan and develop a best of breed solution unique for your IT environment. When it comes to building a robust IT environment, it is worth involving Viglen's technical consultants.



### Live monitoring

Viglen's live monitoring service ensures you have a clear assessment of your critical network devices. This service helps you to proactively maintain your IT estate with frequent reports and automatic alerts that notify staff of unscheduled issues or events.



### Customer service desk

When you need assistance, Viglen's dedicated customer service desk is contactable by telephone, email or remote support and is ISO 20000-1 certified. Your query will be managed by a dedicated team in a professional, efficient and friendly manner to ensure a speedy resolution.



### Hardware and warranty support

Our service levels work around your schedule and offer personalised hardware and warranty support. Viglen's engineers are fully certified to support multivendor technologies such as servers, HPC's, desktops and peripherals which reduces administration and management time for your organisation. With Viglen's on-site engineers based all over the UK, you can be assured of a quick response to minimise any down time. Our highly trained engineers undergo rigorous training to ensure high service levels



### Prioritised service

We understand that any downtime can significantly affect your organisation whether it occurs during office hours or after hours. Viglen have introduced a prioritised service which allows you to ensure you have preferential access when you need it. This service is only available when your organisation pre-purchases engineering support, which is offered at a reduced rate.



### Network and server OS support

Avoid any downtime while increasing efficiency with technical support from Viglen's engineers to resolve complex software and network problems.