## SCALAR 10K

### The First SAN-Enabled Library for Consolidated Enterprise Backup

700 TO 5,000 TAPES

GROWTH OPTIONS TO 15,885 TAPES

LTO, AIT, SDLT/DLT, 3590 DRIVE SUPPORT

INSTANT CAPACITY ON DEMAND

INTEGRATED STORAGE NETWORKING ARCHITECTURE

The ADIC® Scalar® 10K is the SAN-enabled enterprise library that lets IT departments consolidate storage in a single, easily managed resource. It is the industry's first capacity-on-demand library, delivering built-in room to grow and allowing users to increase storage by activating additional capacity whenever they need it. The Scalar 10K operates seamlessly in new or existing storage networks. It supports multiple protocols and fabrics at the same time, providing industry-leading scalability, capacity, availability, and technology independence. The Scalar 10K's management tools offer integrated SAN and NAS support, library virtualization, and device-level security that includes the industry's first built-in SAN firewall. A dual aisle configuration featuring redundant robotics offers the highest levels of performance and reliability.
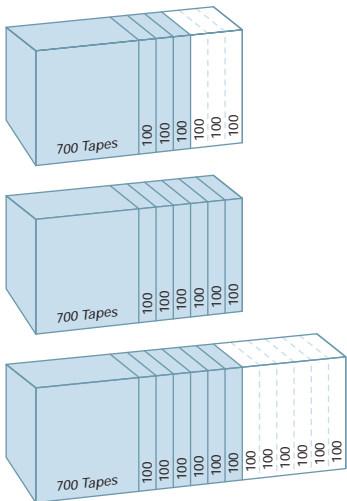
*The Scalar 10K provides built-in room to grow and integrated SAN management.*

### FEATURES AND BENEFITS

▸ Capacity on demand lets IT departments activate additional storage instantly while paying only for the storage they actually use

▸ Qualified storage network interoperability means seamless integration into new or existing SANs

▸ Integrated storage network support improves SAN backup performance and reliability

▸ High drive count for maximum performance and flexible configurations

▸ Supports LTO, AIT, SDLT/DLT, and 3590 technology; provides easy technology migration and options for mixed-media operation

▸ High availability features, including true 2N power, dual library control paths, and hot-swap drives

▸ Five slots per second inventory speed; auto-discovery and auto-calibration of all components for rapid configuration

▸ Intelligent storage management tools include remote monitoring, email alert, and library virtualization

▸ One-year on-site service included for highest levels of protection

ULTRIUM LTO 2    SUPER DLT TAPE    DLT TAPE    AIT 3 Advanced Intelligent Tape    **Magstar 3590**

## SCALAR 10K CAPACITY-ON-DEMAND LIBRARIES

The Scalar 10K's capacity-on-demand scalability is designed to make it easy for IT departments to increase their storage as their data grows and to pay only for the storage they actually use. In capacity-on-demand libraries, extra capacity is delivered that users can activate in increments of 100 tape slots using software authorization keys. When most of the capacity of an installed unit has been activated, ADIC delivers additional capacity upgrades without charge. Scalar 10K capacity-on-demand libraries provide seamless pay-as-you-grow scalability from 700 to nearly 5,000 tape cartridges and from 1 to 96 drives. And through all its capacity expansion, the Scalar 10K uses ADIC's barrier-free library architecture, which provides a single, high-performance storage system that never uses pass-through ports.

The table below shows the delivered capacity, upgrade points, drive positions available, and overall physical dimensions for Scalar 10K capacity-on-demand libraries.
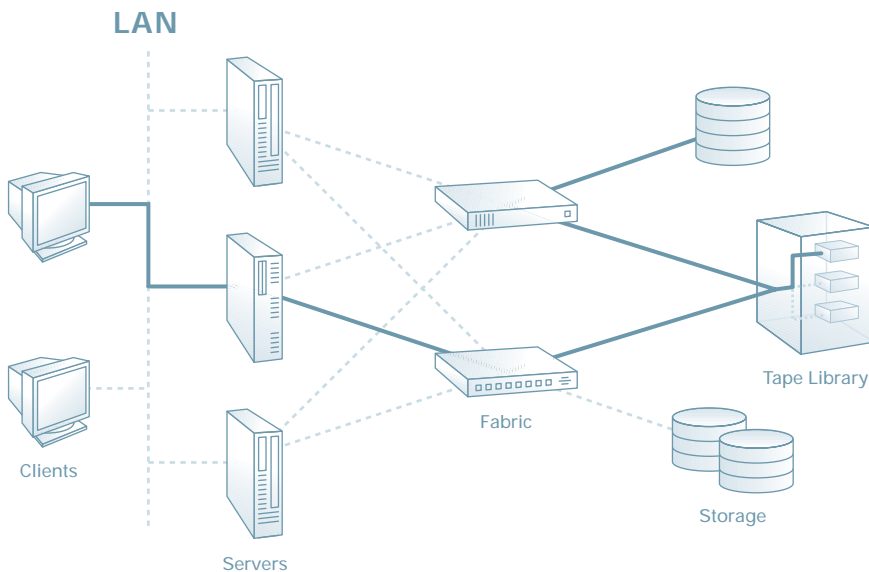
**When You Need More Tape Slots You Activate Them With A Software Key**

*With capacity-on-demand scalability, users add capacity as their data grows and pay only for the storage they actually use. Most upgrades are activated via software keys, and all physical capacity enhancements are implemented without pass-through ports.*

| Drive Technology | Activated Media | Cartridge Positions | Total Drive Positions | Overall System Size: D x L x H |
|---|---|---|---|---|
| LTO-2/LTO-1/LTO Native Fibre | 700 to 1,300 | 1,785 | 36 | 4.3 x 10.5 x 6.4 feet |
| | 1,400 to 2,000 | 2,865 | 60 | 4.3 x 15.5 x 6.4 feet |
| | 2,100 and up | 3,945 | 84 | 4.3 x 20.5 x 6.4 feet |
| AIT-3/AIT-2 | 700 to 1,700 | 2,391 | 48 | 4.3 x 10.5 x 6.4 feet |
| | 1,800 to 2,600 | 3,897 | 72 | 4.3 x 15.5 x 6.4 feet |
| | 2,700 and up | 5,403 | 96 | 4.3 x 20.5 x 6.4 feet |
| SDLT/DLT | 700 to 1,100 | 1,494 | 36 | 4.3 x 10.5 x 6.4 feet |
| | 1,200 to 1,700 | 2,398 | 60 | 4.3 x 15.5 x 6.4 feet |
| | 1,800 and up | 3,302 | 84 | 4.3 x 20.5 x 6.4 feet |
| 3590 | 700 to 1,100 | 1,594 | 8 | 5.0 x 10.5 x 6.4 feet |
| | 1200 to 1,700 | 2,498 | 16 | 5.0 x 15.5 x 6.4 feet |
| | 1,800 and up | 3,402 | 24 | 5.0 x 20.5 x 6.4 feet |

## SCALAR 10K MAXIMUM CAPACITY AND MIXED-MEDIA LIBRARIES

For users with requirements for mixed media or higher cartridge and drive counts than capacity-on-demand libraries, the Scalar 10K offers maximum capacity models. These libraries provide up to 15,885 tapes, 648 drives, the ability to support multiple kinds of media at the same time, and a high degree of configuration flexibility. Contact your ADIC representative for complete options.

## STORAGE NETWORKING LIBRARY WITH INTELLIGENT MANAGEMENT

The Scalar 10K is the first library to integrate storage networking support into its architecture for better performance, higher reliability, and easier management. Its direct SAN connection makes it easy to set up and operate. Its data path conditioning builds in error recovery and proactively verifies that paths are ready to carry data. And the Scalar 10K's integrated SAN firewall protects your data from unauthorized access. The Scalar storage networking architecture can extend to include Gigabit Ethernet protocols like iSCSI, and the technology is certified for compatibility with leading SAN disk and NAS appliance providers.

**LAN**

Clients

Servers

Fabric

Storage

Tape Library

*The Scalar 10K's integrated storage networking support improves backup reliability through end-to-end path verification.*

**Qualified Compatibility**
The Scalar storage networking architecture is qualified for compatibility with leading storage devices and backup software, including:

| | |
|---|---|
| • Brocade | • HP |
| • CA | • IBM |
| • CommVault | • Legato |
| • Dell | • McData |
| • EMC | • NetApp |
| • HDS | • Veritas |

Please see www.adic.com for the most up-to-date compatibility information.

**VERITAS**
ENABLED

## INCREASED DATA AVAILABILITY AND MANAGEABILITY

The Scalar 10K's power grid features internal buses that provide full 2N power throughout, both for the library controller and for all its drives. Dual external AC power and hot-swap drives are standard, as are dual library control paths and dual data paths within storage networks. The library architecture is even designed to support a redundant robotic system. Maximum system uptime is provided by auto-calibration, self-configuration, and magazine-based bulk loading of up to 14.4TB (native) at a time. Scalar 10K management tools also offer full remote operation, library partitioning or "virtualization," and status reporting via user-defined SNMP event thresholds and e-mail and pager alerts.

*The VERITAS Enabled logo indicates that a product has been tested for compatibility with VERITAS products in certain configurations. See http://www.veritas.com/Enabled for more information regarding compatibility and limitations on VERITAS' liability. VERITAS and the VERITAS Enabled Logo are trademarks of VERITAS Software Global Corporation.*

## LIBRARY CONFIGURATIONS

| CAPACITY-ON-DEMAND LIBRARIES | | | | | CUSTOMER SPECIFIC CONFIGURATIONS | | |
|---|---|---|---|---|---|---|---|
| Technology | Drives | Cartridges | Increments | Capacity (TB)[1] | Drives | Cartridges | Capacity (TB)[1] |
| LTO-2 | Up to 84 | 700 to 3,945 | 100 tapes | 1,578.0 | Up to 324 | Up to 9,582 | Up to 3,832.8 |
| LTO-1 | Up to 84 | 700 to 3,945 | 100 tapes | 789.0 | Up to 324 | Up to 9,582 | Up to 1,916.4 |
| SDLT 320 | Up to 84 | 700 to 3,302 | 100 tapes | 1,056.6 | Up to 324 | Up to 8,014 | Up to 2,564.5 |
| SDLT 220 | Up to 84 | 700 to 3,302 | 100 tapes | 726.4 | Up to 324 | Up to 8,014 | Up to 1,763.0 |
| AIT-3 | Up to 96 | 700 to 5,403 | 100 tapes | 1,404.8 | Up to 648 | Up to 15,885 | Up to 4,130.1 |
| AIT-2 | Up to 96 | 700 to 5,403 | 100 tapes | 702.4 | Up to 648 | Up to 15,885 | Up to 2,065.2 |
| 3590 H1A | Up to 24 | 700 to 3,402 | 100 tapes | 612.4 | Up to 104 | Up to 7,738 | Up to 1,392.8 |

Please see www.adic.com for cartridge and drive counts for Scalar 10K libraries featuring redundant robotics. The Scalar 10K also supports LTO Native Fibre Channel.

The Scalar 10K supports traditional component pricing for systems needing higher cartridge and drive counts or mixed-media operation.

## RELIABILITY

| | |
|---|---|
| **Library MCBF:** | Greater than 2,000,000 |
| **Library MTTR:** | 30 minutes |
| **Power:** | 2N power for all systems and drives |
| **Library Control Ports:** | Dual, redundant ports are standard |
| **Diagnostics:** | SNMP traps reported through RMU or Scalar DLC. Built-in self-test, store/recall past events, fault isolation assistance, self-initiating configuration and calibration; e-mail alert |
| **Module Upgrade:** | Any storage module may be added in two hours; customer-installable drive and slot upgrades |

## ENVIRONMENTAL

| | |
|---|---|
| **Power:** | 208-240 VAC; 20 amp per cabinet |
| **Temperature:** | 16 to 32°C operating |
| **Humidity:** | 15 to 75% non-condensing operating |

## OPERATION

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|---|---|
| **Cartridge Exchanges:** | Up to 450 per hour |
| **Drive Interface:** | LTO and native fibre: SCSI-2 LVD; AIT: SCSI-2 LVD; SDLT/DLT: SCSI-2 LVD; integrated FC interface optional for all; 3590: SCSI-2, SNC or Native FC LVD or HVD |
| **Library Interface:** | SCSI-2 LVD; integrated FC interface optional |
| **Inventory Speed:** | 100 slots in 20 seconds |
| **Configuration:** | Auto-discovery and auto-calibration for installed/added components (modules, tapes, drives, magazines, etc.) |
| **Import/Export:** | Up to 72 (LTO/SDLT/DLT/3590) or 108 (AIT) positions in removable magazines |

## STORAGE NETWORKING SUPPORT

| | |
|---|---|
| **Platform/Connectivity:** | SNC™ 5100 (2Gbps Fibre Channel) |
| **Management Services:** | End-to-end path verification, error recovery, drive performance optimization, SAN security (Scalar Firewall Manager), serverless backup (Data Mover Module), connectivity failover, switch-port aggregation |

## COMPLIANCE AND CERTIFICATION

| | |
|---|---|
| **Safety:** | UL-1950 ITE, CSA950, EN 60950 |
| **Emissions:** | FCC #47 CFR, Part 15, Class A, CSA C108.8M, EN 55022, Class A |
| **Immunity:** | IEC (1000-4-2, 3, and 4) |
| **International:** | CE, GS |

## SOFTWARE AND PLATFORMS

Consult the most recent ADIC Software Compatibility Guide on www.adic.com for a complete list of software and platforms compatible with the Scalar 10K.

## DRIVES AND PERFORMANCE[1]

| Drive Type | Cartridge Capacity Native / Compressed (GB) | Drive Throughput Native / Compressed (MB/sec) | Data Buffer (MB) | File Access Time (sec) |
|---|---|---|---|---|
| LTO-2 | 200 / 400 | 35 / 70 | 64 | 49 |
| LTO-1 | 100 / 200 | 15 / 30 | 32 | 54 |
| SDLT 320 | 160 / 320 | 16 / 32 | 64 | 70 |
| SDLT 220 | 110 / 220 | 11 / 22 | 32 | 70 |
| AIT-3 | 100 / 260 | 12 / 31 | 18 | 27 |
| AIT-2 | 50 / 130 | 6 / 15.6 | 10 | 27 |
| 3590 H1A[2] | 60 /180 | 14 / 42 | 16 | — |

Please see www.adic.com/drives for more drive specifications.

[1] Assumes 2:1 compression for L

[2] Extended High P

**Intelligent Storage is Economical Scalability**

ADIC's capacity-on-demand technology lets you scale with pay-as-you-grow simplicity. It's a convenient, cost-effective solution for keeping expenditures in check as your storage needs grow.

IS
INTELLIGENT STORAGE™