



## SCALAR 1000

Long-Term Protection for High-Growth Environments

LTO, SDLT/DLT, AIT DRIVE SUPPORT

1 TO 48 DRIVES

118 TO 1,182 CARTRIDGES

UP TO 375TB CAPACITY

INTEGRATED STORAGE NETWORKING ARCHITECTURE

The ADIC® Scalar® 1000 is a high-performance scalable tape library with integrated storage networking support that reduces Total Cost of Ownership in high-growth environments. With its unique barrier-free expansion, the Scalar 1000 grows easily with your data while maintaining superior performance and reliability—and eliminating use of pass-through ports. To make it easy for IT departments to add SAN or NAS backup, it integrates serverless backup, self-reporting connectivity checks, a built-in SAN firewall, and data path conditioning to increase backup performance and reliability. The Scalar 1000 supports LTO, DLT/SDLT, and AIT technology in single or mixed-media configurations, and it offers up to 16 “virtual library” partitions.



*The Scalar 1000 expands with data and integrates advanced SAN support.*

### FEATURES AND BENEFITS

- ▶ Seamless growth path—scalable design allows cost-effective expansion without using pass-through ports
- ▶ Qualified storage network interoperability means seamless integration into new or existing SANs
- ▶ Integrated storage network support improves SAN backup performance and reliability
- ▶ Intelligent management tools include backup error recovery, drive performance optimization, and SNMP event reporting
- ▶ Browser-based management lets users perform all library operations and diagnostics remotely
- ▶ Proven in Fortune 1000 companies for scalability and reliability
- ▶ Supports LTO, DLT/SDLT and AIT in single or multi-drive installations for maximum flexibility and performance
- ▶ Provides up to 16 “virtual library” partition options for multiple applications support
- ▶ One-year on-site service included for highest levels of protection

## SCALAR 1000 BUILDING BLOCKS







### Scalar 1000 Features a Single Robotic Mechanism For The Entire Library

For maximum performance and reliability at the lowest cost, the Scalar 1000 features barrier-free scalability. When new modules are added, the x-axis robotics are extended through all units for continuous high speed service without pass-through ports.

The Scalar 1000 control module, which can also serve as a self-contained library, is configured with space for 6 or 12 drives, depending on configuration and drive type. Expansion modules can be configured for media storage only (no drives), or with room for 6 or 12 drives. When fewer drive bays are required, the modules are designed to provide room for more media.

Adding modules, drives, drive bays, and cartridge positions are simple field upgrades for maximum flexibility and investment protection. After upgrades, the library self-discovers changes and automatically reconfigures system settings.

### LIBRARY CONFIGURATIONS

Control Module	Drives	LTO/DLT/SDLT							AIT				
		Cartridges		Capacity (TB) <sup>1</sup>					Drives	Cartridges	Capacity (TB) <sup>1</sup>		
		LTO	DLT/SDLT	LTO-2	LTO-1	SDLT 320	SDLT 220	DLT 8000			AIT	AIT	AIT-3
	1-6	188	158	75.2	37.6	50.6	34.8	12.6	2-12	237	61.6	30.8	
	7-12	140	118	56.0	28.0	37.8	26.0	9.4					
with 1 Expansion Module		1-6	438	368	175.2	87.6	117.8	81.0	29.4	2-12	552	143.5	71.8
		7-12	390	328	156.0	78.0	105.0	72.2	26.2	14-24	492	127.9	64.0
		13-18	342	288	136.8	68.4	92.2	63.4	23.0				
		19-24	294	248	117.6	58.8	79.4	54.6	19.8				
with 2 Expansion Modules		1-6	688	578	275.2	137.6	185.0	127.2	46.2	2-12	867	225.4	112.7
		7-12	640	538	256.0	128.0	172.2	118.4	43.0	14-24	807	209.8	104.9
		13-18	592	498	236.8	118.4	159.4	109.6	39.8	24-36	747	194.2	97.1
		19-24	544	458	217.6	108.8	146.6	100.8	36.6				
		25-30	496	418	198.4	99.2	133.8	92.0	33.4				
		31-36	448	378	179.2	89.6	121.0	83.2	30.2				
with 3 Expansion Modules		1-6	938	788	375.2	187.6	252.2	173.4	63.0	2-12	1,182	307.3	153.7
		7-12	890	748	356.0	178.0	239.4	164.6	59.8	14-24	1,122	291.7	145.9
		13-18	842	708	336.8	168.4	226.6	155.8	56.6	24-36	1,062	276.1	138.1
		19-24	794	668	317.6	158.8	213.8	147.0	53.4	38-48	1,002	260.5	130.3
		25-30	746	628	298.4	149.2	201.1	138.2	50.2				
		31-36	698	588	279.2	139.6	188.2	129.4	47.0				
		37-42	650	548	260.0	130.0	175.4	120.6	43.8				
		43-48	602	508	240.8	120.4	162.6	111.8	40.6				

### SYSTEM COMPONENTS

#### Scalar 1000 Control Module

Drive Technology	Drives	Cartridges
LTO	6	Up to 188
	12	Up to 140
SDLT/DLT	6	Up to 158
	12	Up to 118
AIT	12	Up to 237

#### Scalar 1000 Expansion Module

Drive Technology	Drives	Cartridges
LTO	0	Up to 250
	6	Up to 202
	12	Up to 154
SDLT/DLT	0	Up to 210
	6	Up to 170
	12	Up to 130
AIT	0	Up to 315
	12	Up to 255

<sup>1</sup>Assumes 2:1 average compression for SDLT/DLT and LTO; 2.6:1 average compression for AIT.



## LIBRARY CONFIGURATIONS

	LTO				DLT/SDLT					AIT			
	Drives	Cartridges	Capacity (TB) <sup>1</sup>		Drives	Cartridges	Capacity (TB) <sup>1</sup>			Drives	Cartridges	Capacity (TB) <sup>1</sup>	
			LTO-2	LTO-1			SDLT 320	SDLT 220	DLT 8000			AIT-3	AIT-2
Base Configuration	1 to 12	Up to 188	75.2	37.6	1 to 12	Up to 158	50.6	34.8	12.6	2 to 12	Up to 237	61.6	30.8
w/ 1 Exp. Mod.	1 to 24	Up to 438	175.2	87.6	1 to 24	Up to 368	117.8	81.0	29.4	2 to 24	Up to 552	143.5	71.8
w/ 2 Exp. Mod.	1 to 36	Up to 688	275.2	137.6	1 to 36	Up to 578	185.0	127.2	46.2	2 to 36	Up to 867	225.4	112.7
w/ 3 Exp. Mod.	1 to 48	Up to 938	375.2	187.6	1 to 48	Up to 788	252.2	173.4	63.0	2 to 48	Up to 1,182	307.3	153.7

## RELIABILITY

<b>Library MCBF:</b>	Greater than 1,000,000
<b>Library MTTR:</b>	30 minutes
<b>Power:</b>	Optional secondary power supply
<b>Diagnostics:</b>	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; SAN device health checks
<b>Module Upgrade:</b>	Any storage module may be added in two hours; customer-installable drive upgrades

## PHYSICAL

<b>Dimensions (per module):</b>	29.5"W x 47"D x 72"H (74.9cm x 119.4cm x 182.9cm)
<b>Max. Weight:</b>	1,052 lbs (477kg) (Control Module) 817 lbs (372kg) (Expansion Module)

## OPERATION

<b>Cartridge Exchanges:</b>	350 peak swaps per hour
<b>Drive Interface:</b>	LTO: SCSI-2 LVD; AIT, SDLT, DLT: SCSI-2 LVD or HVD; integrated FC interface optional for all
<b>Library Interface:</b>	SCSI-2 HVD; integrated FC interface optional
<b>SCSI Connection:</b>	68-pin micro-D
<b>Configuration:</b>	Auto-discovery and auto-calibration for installed/added components (modules, tapes, drives, etc.)
<b>Import/Export:</b>	Up to 12 (LTO/SDLT) or 18 (AIT) cartridge positions

## ENVIRONMENTAL

<b>Electrical:</b>	115-230 VAC, 1.6 kVA
<b>Temperature:</b>	16 to 32°C operating
<b>Humidity:</b>	15 to 75% non-condensing operating

## COMPLIANCE AND CERTIFICATION

<b>Safety:</b>	UL-1950 ITE, CSA950, EN 60950
<b>Emissions:</b>	FCC #47 CFR, Part 15, Class A; CSA C108.8M; EN 55022, Class A; EN 6100-3-2, 3 (LTO); IEC (1000-4-2, 3, and 4) (DLT and AIT); EN 61000-4-2, 3, 4, 5, 6, 8, and 11 (LTO)
<b>Immunity:</b>	IEC (1000-4-2, 3, and 4) (DLT and AIT); EN 61000-4-2, 3, 4, 5, 6, 8, and 11 (LTO)
<b>International:</b>	CE, GS

## STORAGE NETWORKING SUPPORT

<b>Platform/Connectivity:</b>	SNC™ 5100 (2Gbps Fibre Channel)
<b>Management Services:</b>	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

## SOFTWARE AND PLATFORMS

Consult the most recent ADIC Software Compatibility Guide on [www.adic.com](http://www.adic.com) for a complete list of software and platforms compatible with the Scalar 1000.

## DRIVES AND PERFORMANCE<sup>1</sup>

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
DLT 8000	40 / 80	6 / 12	8	60
AIT-3	100 / 260	12 / 31	18	27
AIT-2	50 / 130	6 / 15.6	10	27

Please see [www.adic.com/drives](http://www.adic.com/drives) for more drive specifications.

<sup>1</sup> Assumes 2:1 compression for LTO and SDLT/DLT, 2.6:1 compression for AIT.

## ABOUT ADIC

Advanced Digital Information Corporation (ADIC) is a leading provider of Intelligent Storage™ solutions to the open systems marketplace. ADIC is the world's largest supplier of automated tape systems using the drive technologies most often employed for backing up open system, client-server networks.\* The company's data management software and storage networking appliances provide IT managers innovative tools for storing, managing, and protecting their valuable digital assets. ADIC storage products are available through a worldwide sales force and a global network of resellers and OEMs, including Cray, Dell, Fujitsu-Siemens, HP, IBM, and Sun.

## ADIC GLOBAL HEADQUARTERS

11431 Willows Road NE  
P.O. Box 97057  
Redmond, WA 98073-9757 USA

Toll-Free: **800.336.1233**  
Phone: **425.881.8004**  
Fax: **425.881.2296**

[www.adic.com](http://www.adic.com)

## Intelligent Storage is Self-Managing

Only ADIC's storage networking libraries feature data path conditioning, a technology that proactively verifies the integrity of paths carrying data to the library.



\*IDC 2001 revenue and unit market share data for all automated systems using DLT, SDLT, LTO, 8mm or AIT drives.