



ArcticBlue



A Breakthrough in Nearline Disk Storage

SPECTRALOGIC.COM

ArcticBlue

IT TOOK A TAPE COMPANY TO RELEASE THE TRUE POTENTIAL OF DISK

ArcticBlue leverages BlackPearl's hybrid storage architecture and Shingled Magnetic Recording (SMR) media, creating the first object storage based disk platform that delivers maximum longevity, efficiency, and cost effectiveness with the performance of online disk.

Drive Lifecycle Management, Spectra's power down technology, extends the life of your disk archive while delivering fast access to deep storage. Engineered for data reliability and integrity, local erasure coding combined with Spectra's unique implementation of ZFS software brings new life to long-term deep storage disk.

ArcticBlue creates an on-premise cloud with an S3 interface to make deep storage more accessible – all from a company that you want to do business with.

MORE THAN DOUBLE THE LIFE AT HALF THE COST OF TODAY'S NEARLINE STORAGE – AS LOW AS 10¢/GB (U.S. PRICING)

Everything you Expect from Disk Performance at the Cost and Longevity of Digital Tape

ArcticBlue offers the lowest TCO nearline disk storage solution without sacrificing reliability and accessibility. Built around SMR technology, ArcticBlue provides long term disk storage for twice the life at half the cost of traditional disk archives.

Drive Lifecycle Management

Drive Lifecycle Management extends the life of SMR drives through intelligent idling - more than doubling the life of today's disk systems and eliminating the typical 3 year obsolescence cycle.



Makes Deep Storage More Accessible...

FAST ACCESS TO DEEP STORAGE

ArcticBlue adds fast random recall allowing for parallel access across all bands and nodes simultaneously. The BlackPearl deep storage gateway seamlessly creates a genetically diverse copy on any combination of SAS HDDs, SATA HDDs, TS1150 tape, LTO-7 tape, or even ejected tape copies.

QUICKER INTEGRATION WITH S3 INTERFACE

The S3 interface eliminates the need for data movers and provides direct integration between end user applications and deep storage disk and tape. Use existing S3 clients with little to no changes required - providing a faster installation.

PRIVATE CLOUD ON PREMISE

Owning your own private cloud means YOU have control of your data. You control who has access, if it is stored in centralized or distributed locations, how long you keep it, and that it is on multiple storage mediums to ensure genetic diversity.

PURPOSE BUILT FOR:



Private Cloud

As the true costs of public cloud are realized, hidden costs of public cloud retrieval and unpredictable access times to critical content, organizations with large amounts of data are turning to private cloud solutions. ArcticBlue offers an on premise, nearline storage ecosystem using an S3 interface that provides secure fast access to all your critical content at the most affordable TCO.

Media and Entertainment

With a focus on instant access of digital assets and monetization of content, one of the most critical needs in the Media and Entertainment industry is to have access to your content when you need it. ArcticBlue's nearline digital archive solution allows your assets to be available and accessible without the complexities and costs associated with traditional archives and expensive data movers.



High Performance Computing

High Performance Computing environments require storage of massive amounts of data - forever, with the ability to quickly provide parallel access across the complete storage system to multiple users in any location, concurrently. ArcticBlue helps push the boundaries of operational objectives, giving you cost-effective storage with user-transparent, nearline access that meets all of your performance, growth, and environmental needs.

Video Surveillance

Organizations in many industries use video surveillance to improve safety and security, protect business assets, meet legal requirements, and much more. To meet these demands, organizations are installing additional high definition cameras and retaining video for longer periods. ArcticBlue provides long-term, affordable, scalable object storage to ensure your IP video is protected and readily available.



Life Sciences

Life sciences, genomics, research, and biotech organizations are constantly creating data and using that data to conduct research. They have no way of knowing which piece of information will be critical. As a result of this a vast amount of data must be captured and immediately archived in such a way that it remains easily accessible and quickly retrievable in the long-term.

BRINGS COMPLETE GENETIC DIVERSITY TO YOUR PRIVATE CLOUD

Digital Preservation

Genetic diversity is a strategy to store your information across a range of media types (SSDs, SAS HDDs, SATA HDDs, cloud, and tape) to digitally preserve your data forever. In a world driven by information, and threatened by all that attacks information, genetic diversity in storage medium is a key measure of a secure storage strategy. Geographic dispersal of storage, another key strategy, requires data to be stored in two or more locations. Accuracy of replication is the final component of the digital preservation strategy. These are accomplished through BlackPearl's ABM and replication of data to a range of media types, as well as tape's inherent offsite capability.

BlackPearl Enabled

BlackPearl provides an S3 front end interface to deep storage disk and tape. BlackPearl's new Advanced Bucket Management (ABM) feature fully automates all aspects of deep storage including policy based multiple copies on diverse media types without the need for expensive middleware to operate the libraries and stream data to tape drives. BlackPearl delivers seamless data management enabling infinite retention, seamless growth, and unlimited retrieval of data for as low as pennies per Gigabyte.

Advanced Bucket Management (ABM)

BlackPearl's ABM policies enable the system to write data intelligently to multiple tape libraries, tape partitions, and ArcticBlue's nearline disk storage. This allows BlackPearl to control where and how data is written like never before.

Product Specifications

ArcticBlue Nodes	1/2	1	2	4	8
Number of Bands	2	4	8	16	32
RAW Capacity TB	384 TB	768 TB	1536 TB	3072 TB	6144 TB
Usable Capacity Uncompressed TB	320 TB	640 TB	1280 TB	2560 TB	5120 TB
Weight *	168.2 lbs.	245 lbs.	490 lbs.	980 lbs.	1960 lbs.
Global Spares	2	4	8	16	32
Throughput	1 GB per Second				
Power Consumption	775W (R/W), 140W Idle per Node				
Drive Type	8TB SMR Drives				
Height	4U; 7" (178mm) per Node				
Width	17.5" (444mm) per Node				
Depth	40" (1016mm) (including Cable Mgmt) per Node				



*Without weight of BlackPearl

For complete specifications, please contact your Spectra Representative or visit www.spectralogic.com/ArcticBlue.

Features

- **BlackPearl Enabled** : Industry standard S3 object storage interface
- **Drive Lifecycle Management**: Power down technology extends the life of drives
- **SMR** : Leveraging this technology to its fullest by using sequential data writes from physical high speed cache to increase performance, similar to writing to tape
- **Spectra's ZFS Implementation and Local Erasure Coding**: Unleashing the power of ZFS while eliminating the complexity
- **Global Spare** : Built in hot spare drives to ensure reliability
- **Intelligent Rebuilds** : ZFS architecture allows rebuilds based only on used capacity
- **Triple Parity** : Statistically eliminates data loss through redundancy and automatic rebuilds when properly monitored and maintained
- **Continuous Data Checksum** : Statistically eliminates bit-rot and undetected bit error rate through continuous data checking while in storage
- **End-to-End Checksum** : Host can send and require end-to-end checksum, where BlackPearl verifies and maintains the checksum for data integrity
- **Very Wide Bands** : Maximizes system performance while providing maximum protection

Support When, Where and How You Want It

Support for Spectra ArcticBlue is simple and straightforward. The warranty of your ArcticBlue includes one year of standard part replacement support. Other options for upgrading your support range from 24x7 phone support, to more advanced alternatives including Next Day, or Four-Hour On-Site service. Our expertise comes from over 36 years of solving real problems with hands-on lab work and on-site technical support. Our support staff is cross-trained over the entire storage environment – not just hardware – so we can assist you with all aspects of a problem. From open to close, we are committed to resolving any issue.

About Spectra Logic Corporation

Spectra Logic develops deep storage solutions that solve the problem of long term storage for business and technology professionals dealing with exponential data growth. Dedicated solely to storage innovation for more than 36 years, Spectra Logic's uncompromising product and customer focus is proven by the largest information users in multiple vertical markets globally. Spectra enables affordable, multi-decade data storage and access by creating new methods of managing information in all forms of deep storage — including archive, backup, cold storage, cloud and private cloud.

