



# Fibre Channel Solid State RAID

Dual Port

Link Speed: 4 Gbit/ sec.

Capacity: Scalable from 128 GB to 2 TB

HTML / Web Page Configuration Interface

SNMP V3 Support, via Gigabit Ethernet



VANGUARD

This VRATR product class is designed to deliver 4 Gbit/sec., dual port, Fibre Channel interface speed and TByte storage capacity in a rugged, compact, lightweight and low power mass storage device.

The VRATR products support a fully integrated HTML / Web Page user interface and SNMP V3 for device configuration, control, and monitoring via a front panel Gigabit Ethernet connection.



## STORAGE SPECIFICATIONS & OPTIONS

Storage Technology:

Interface:

Legacy Interface:

Fibre Channel Ports:

Protocol Support:

Storage Capacity:

Storage Organization:

RAID Configurations:

Read – Write Burst Data Rate / Channel Speed:

Write Sustained Data Rate:

Read Sustained Data Rate:

Access Time:

Active Wear Leveling:

Data Retention:

Embedded De-Classification Application:

Solid State (FLASH)

Fibre Channel, 4 Gbits/sec. Link Speed

Auto-negotiation to 2 Gbits & 1 Gbit/sec.

Two, full duplex ports

SCSI Fibre Channel Protocol (FCP)

128 GB to 2 TB

RAID of 2 to 8 Independent Drives

0, 1, 3, 5, 6

4 Gbits/sec. on each FC port

Dependent on RAID configuration. Generally  $\geq 150$  MBytes / sec.

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< 0.02 msec.

Yes

> 10 years

Yes. Configurable to customer requirements.

## TECHNICAL SPECIFICATIONS

### Mechanical:

Form Factor:

Weight:

Internal Cooling:

External Cooling Options:

ARINC 404A, ATR Size = 1/2 Short

=< 30 lbs.

Conduction from internal components to external surfaces.

1) Forced Air Convection Cooling.

2) Conduction Cooling.

3) Liquid Cooling.

Yes.

Moisture / Vapor Sealed Enclosure:

### Electrical Power:

Input Voltage Options:

Input Power, Read / Write:

Input Power, Declassification:

Input Power, Peak / Transient:

Power Supply Type:

Mil-Std 704E Compliant:

1) + 28 V DC

2) 90-250 V AC 50-60 Hz.

=< 175 Watts

=< 200 Watts

=< 350 Watts

Vanguard Rugged Military Grade.

Yes, with exception of hold-up time. This ATR size does not have power hold-up capacitors; hold up time = 0 sec.

Optional. Depending on storage capacity, may require a 1/2 ATR, Long chassis.

Redundant Power Supply:

### EMI / RFI:

Mil-Std 461E Conducted Emissions:

Mil-Std 461E Conducted Susceptibility:

Mil-Std 461E Radiated Emissions:

Mil-Std 461E Radiated Susceptibility:

Compliant. Input filter / attenuation modules.

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Compliant. Shielded chassis.

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### Environmental:

Operational Temperature Options:

Non-Operational Temperature:

Humidity:

Operational Vibration:

Operational Shock:

Altitude:

1) -40 to +85 C

2) 0 to +50 C

-55 to +95 C

=< 90% at 31 C

16.3 G rms, Mil-Std 810F (constant APSD, 20 to 2000 Hz.)

1,500 G, Mil-Std-810F

Up to 80,000 ft.

### EMI / RFI:

Conformal Coating:

Electrical Wiring:

Standard, all circuit boards.

PVC free, except for high frequency data cables that are not commercially available PVC free.



## Product Nomenclature / Part Numbering

### VRATR-1/2S-XXXG/T-FCY

1/2S

XXXG/T

FC

Y

Form Factor: 1/2 ATR, Short

Capacity: 128 GB to 2 TB

Interface: Fibre Channel

Feature / Option Configuration #: 1,2,3...

