L-3 Targa’s Series 4 Gigabit (Gb) Ethernet, Network Attached Storage (NAS), Data Transfer System (DTS) provides a compact, self-contained system to store and retrieve data from a removable Serial Advance Technology Attachment (SATA) flash disk in the most demanding environments. The DTS components are: a Data Transfer Unit (DTU), removable Data Transfer Device (DTD) and a Ground Support Unit (GSU).

This lightweight, compact DZUS-mount unit features single or dual removable 256 GB SATA flash disks that can be easily transported and used to load and retrieve mission, map and maintenance data. Each compact DTD weighs only 500 grams, is small enough to fit in a shirt pocket and is built to withstand extreme temperature, shock and vibration conditions.

L-3’s GEN2 DTU now supports data-at-rest encryption via an optional on-chip encryption accelerator supporting 128-/192-/256-bit AES encryption. Additional features include a sophisticated key management scheme, as well as the ability to have multiple independent encryption partitions per disk.

**KEY FEATURES**

- Small, lightweight, rugged unit that provides reliable, removable data storage
- Interfaces: Two 10/100/1000 Ethernet IEEE 802.3ab ports
- Optional security engine for data encryption
- Data read rates: > 50 MB/sec. over FTP
- Single or dual removable disk (DTD) units
- Configurable
  - Simultaneous NAS and iSCSI (Internet Small Computer System Interface) operations
  - Network bridge between the two Ethernet ports via packet forwarding
  - Advanced Encryption Standard (AES) data encryption coprocessor option
- Access door with door-open detection and DTD power shutdown
- Input power: +28 VDC
- Mounting: CDU-style, panel-mount (DZUS rail) per MS25212C (military standard)
- DTD
  - Capacities: 32 GB to 256 GB; 512 GB in Dual-DTD unit
  - With write-protection and secure-erase features
  - High-reliability connector rated at 100,000 insertion/removals
SERIES 4 GB ETHERNET DATA TRANSFER SYSTEM

MODEL NUMBERS

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>DTD Support</th>
<th>Power</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>SINGLE</td>
<td>DUAL</td>
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<tr>
<td>DTU40SA-50A-2</td>
<td>Flight Unit - Panel-Mount</td>
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<td>DTU40SA-50A-2e</td>
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<tr>
<td>DTU40SA-52A-2</td>
<td>Flight Unit - Panel-Mount</td>
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<td>DTU40SA-52A-2e</td>
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<tr>
<td>GSU49/SA-50A-0</td>
<td>Ground Unit - Desktop</td>
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<td>GSU49/SA-50A-0e</td>
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<tr>
<td>DTD40/SAn-ccc-2</td>
<td>SATA Flash Disk – Data Transfer Device</td>
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<td>SAN – Flash disk type</td>
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<td></td>
<td>Capacity where ccc = unformatted capacity in GB</td>
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<tr>
<td></td>
<td>Available Capacities: 32, 64, 128 and 256 GB</td>
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<td>e.g., DTD40/SA3-32G-2</td>
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DTU PANEL MOUNT UNITS DTU40/SA-5X-2

Single DTD                  
Dual DTD

**Physical**
- Form Factor: K=8 per MS25221C
- K=12 per MS25221
- Unit Case: 9.5 in. x 5 in. x 2.9 in. (L x W x H)
- Front Panel: 5.75 in. x 3 in. x .3 in. (L x W x H)
- Weight (max): 2.3 kg
- Input Power: 28 VDC, RTCA D0-160, Cat. Z

**Environmental**
- Operating Storage: -40 °C to +71 °C
- -55 °C to +85 °C
- MIL-STD-810E, Method 501.3
- MIL-STD-810E, Method 502.3
- Altitude: 50,000 ft.
- MIL-STD-810E, Method 500.3
- Temperature Altitude: 30 000 ft.
- -40 °C to +55 °C (10 cycles)
- MIL-STD-810, Method 520.0 Procedure III
- Humidity: 10% to 100% condensing
- RTCA DO-160D, Sec. 6, Cat. B
- Shock: Operating 20 g, 9 msec, ½ sine
- MIL-STD-810E, Method 516.4
- Thermal Shock: -35 °C to 49 °C
- MIL-STD-810D, Method 503.2
- Crash Hazard: Operating 40 g, 9 msec, ½ sine
- MIL-STD-810E, Method 516.4
- Vibration: PSD 0.04 g/Hz, 5 to 2000 Hz
- MIL-STD-810E, Method 514.4, Cat. 10
- Waterproof: RTCA DO-160D, Sec. 10, Cat. W
- MIL-STD-810E, Method 510.2
- Sand & Dust: RTCA DO-160D, Sec. 12, Cat. D
- Non-operating +55 °C
- MIL-STD-810D, Method 501.2
- Salt Spray: RTCA DO-160D, Sec. 14, Cat. S
- Explosive Atmosphere: Operating -35 °C to 49 °C
- MIL-STD-810D, Method 503.2
- EMI: MIL-STD-461C
- MIL-STD-461E

L-3’s solid-state storage solutions are available in a wide range of form factors and interfaces:

- PC Card DTUs: Serial, SCSI, Ethernet, USB
- USB Flash Disks 3.5-in.
- Removable Disk Systems: Ethernet, SATA, USB

L-3’s network-attached storage (NAS) device functions as a server dedicated to file sharing. Targa’s NAS provides removable SATA flash disk data storage for single or multi-client users over a dual IEEE 802.3ab Ethernet link.

Supported Protocols: FTP, TFTP, NFS, HTTP, DHCP, iSCSI, PXE (BOOTP/TFTP)

Data Transfer Rates:
- FTP: 50 MB/sec.
- NFS v3: 40 MB/sec.
- iSCSI: 35 MB/sec.
- File Reads: 30 MB/sec.
- File Writes: 20 MB/sec.

Average sustained data transfer rates measured with single client over multiple file transfers. Actual end-user data transfer rates will vary depending on network traffic and client system processor loading.

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