



Endace DAG 7.5G2

Endace's DAG™ 7.5G2 is a high-performance, two-port data capture card, designed for use in appliances for monitoring and capturing network traffic at high-speed in 10/100/1000BASE-T and optical 1GbE environments.

The DAG 7.5G2 is ideally suited for use in network performance monitoring, security analytics, data archival and latency measurement applications in large, complex, network environments where 100% packet capture is critical.

Based on PCI Express (PCIe) 1.1 x4, the DAG 7.5G2 delivers full line rate data capture for both ports, regardless of packet size, with captured packets transferred direct to host memory via direct memory access (DMA). This removes interrupt overhead from the host CPU and frees up host CPU cycles for analysis or other tasks.

In addition to interrupt free and zero copy packet capture, the DAG 7.5G2 provides on-card, rule-based steering (directing packets to specific streams) supporting eight rules. This makes analyzing captured traffic simpler and quicker, enabling more powerful analysis and further reducing load on the host CPU.

Captured traffic is available in industry-standard packet capture formats (PCAP) making it easy to use in the applications you choose for monitoring and analysis.

Multiple Endace DAG cards can be combined in a single appliance, enabling high-density deployment, saving rack-space, and further reducing the total cost-of-ownership.

Endace's DAG cards are engineered to ensure long life and reliability. They are trusted by customers around the world to deliver proven 100% accurate capture and low cost-of-ownership with best-in-class performance.

DAG 7.5G2 AT A GLANCE

- 2x SFP monitoring ports each configurable for 10/100/1000BASE-T or optical 1GbE links
- Hardware time-stamping with synchronization from host or external time reference via a dedicated time sync port
- x4 PCIe 1.1 based card
- Linux, FreeBSD and Windows drivers

BENEFITS

Accurate

- 100% packet capture at full line rate for all packet sizes from 64 Bytes to 9600 Bytes
- Nanosecond-level time-stamping accuracy on every packet

Powerful

- Supports eight classification rules for onboard steering of captured traffic in hardware at full line rate

Flexible

- Supports two capture streams for load balancing in multi-core host architecture
- Full packet capture or set length capture configurable
- Compatible with standard server architecture using x4 PCIe 1.1 bus technology

Reliable

- Engineered for high-reliability and extended mean time between failure (MTBF) rates
- Zero-fan cooling reduces failure points

Note: We recommend the DAG 10X2-S and 10X2-P for incorporating in new designs.

DAG 7.5G2 – Technical Specifications

| | |
|----------------------------|---|
| Monitoring interfaces | 2x SFP+ transceivers |
| Network type | IEEE 802.3 |
| Packet encapsulations | Ethernet |
| Hardware packet processing | Data Stream Manager |
| Time synchronization | External: IEEE-1394 connector for RS-422 PPS and IRIG-B signal from GPS, CDMA or TDS (Using adapter). Internal: Host PC clock Other DAG cards |
| Packet timestamping | 7.5ns |
| PCI interface | x4 lane PCIe 1.1 |
| Operating system supported | Endace software is supported on Linux, FreeBSD and Windows |
| Power requirements | Less than 20W |
| Operating temperature | 0 to 50°C (32 to 131°F) |
| Airflow requirements | 200 LFM (@50°C Ambient) |
| Operating humidity | 5 to 95% non condensing |
| Physical dimensions | Half Height, Half Length Height: 64.25mm (2.53") Length: 167.5mm (6.6") |

Companion Products

Transceivers

| | |
|--|------------|
| 1000Base-SX optical Ethernet SFP transceiver, 850nm, Multi-mode with LC connectors | TXR-1000SX |
| 1000Base-LX optical Ethernet SFP transceiver, 1310nm, Single-mode with LC connectors | TXR-1000LX |
| 10/100/1000 Base-T electrical Ethernet SFP transceiver with RJ-45/8P8C connector | TXR-1000TX |
| 1000Base-ZX optical Ethernet SFP transceiver, 1550nm, Single-mode with LC connectors | TXR-1000ZX |

Time Measurement Accessories

| | |
|---|--------|
| Trimble Acutime™ Gold GPS receiver | GPS-2 |
| Endace 2-port Time Distribution Server, accepts serial input from GPS/CDMA sources | TDS-2 |
| Endace 6-port expansion module for TDS-2, shares common reference time source | TDS-6 |
| Endace 24-port Time Distribution Server, accepts serial input from GPS/CDMA sources | TDS-24 |



This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the Federal Communications Commission [FCC] Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction document, may cause harmful interference to radio communications.

Endace™, the Endace logo and DAG™ are registered trademarks in New Zealand and/or other countries of Endace Technology Limited. Other trademarks used may be the property of their respective holders. Use of the Endace products described in this document is subject to the Endace Terms of Trade and the Endace End User License Agreement (EULA).

For more information on the Endace portfolio of products, visit: endace.com/products

For further information, email: info@endace.com