

# EHS-XMC5602

## STANAG 7221 Compliant Network Interface Card

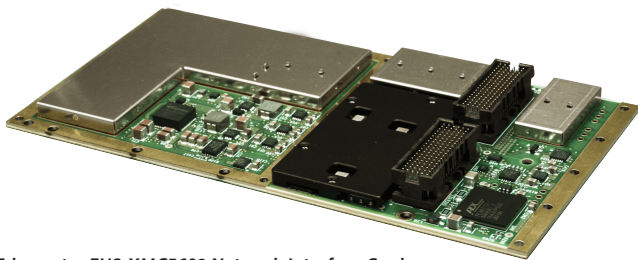


### Product Overview

The Edgewater EHS-XMC5602 high-performance Network Interface Card is designed to provide rapid and affordable data capacity increases on STANAG 3838 and MIL-STD-1553B data buses.

The EHS-XMC5602 can add up to 100Mbps of additional capacity as a separate, independent data network operating on the existing data bus infrastructure. The additional capacity operates in parallel with and independently of the existing STANAG 3838/MIL-STD-1553B signaling. The EHS-XMC5602 complies with NATO STANAG 7221.

The EHS-XMC5602 can be configured as a Bus Controller or as a Remote Terminal and does not rely on the existing legacy STANAG 3838/MIL-STD-1553B Bus Controller to manage the data traffic. No changes are required to the existing STANAG 3838/MIL-STD-1553B hardware or software infrastructure which leads to a dramatic reduction in the cost to integrate, certify and deploy advanced capabilities requiring increased data capacity.



Edgewater EHS-XMC5602 Network Interface Card

### Applications

- Transportation of high-speed data such as video, imagery, enhanced vision systems and advanced data communications
- Load reduction on existing STANAG 3838/MIL-STD-1553B data buses
- Integration into Mission Computers, Stores Management Systems and displays to prepare existing network infrastructure for future development
- Suitable for ground, airborne, surface and sub-surface platforms integrated with STANAG 3838/MIL-STD-1553B data buses
- Appropriate for performing cybersecurity upgrades

### Features

- High-performance STANAG 7221 compliant data bus interface
- PCIe host interface
- Operates on STANAG 3838, MIL-STD-1553B and MACAIR compatible data buses
- STANAG 7221 Bus Controller or Remote Terminal Configuration

### Driver Support

- VxWorks® 5.5.1, 6.3, 6.9
- CentOS 7.3
- Windows® 7 and 10
- Proven on Green Hills® INTEGRITY®

## ORDERING INFORMATION

**Part Numbers:** EHS-XMC5602-L (non-conformally coated)  
EHS-XMC5602-M (conformally coated)  
**Email:** sales@edgewater.ca  
**Phone:** +1 613 271 1101 x3074  
**Available:** Now



## Specifications

### Designed to comply with:

- -40°C to 85°C operating temperature range
- -55°C to 95°C storage temperature range
- 6.0W/6.5W typical/maximum power consumption (measured at 25°C)
- 1% to 95% non-condensing relative humidity
- -15,000 ft (-700m) to 70,000 ft. (21,350m) altitude range
- **Shock** – MIL-STD-810G, Method 516.6, Procedure VI (Bench Handling)
- **Shock** – MIL-STD-810G, Method 516.6, Procedure I, Test Category as defined by paragraph 2.3.2c, figure 516.6-10 (Functional)
- **Vibration** – MIL-STD-810G Method 514.6, Procedure I
- **Acceleration** – MIL-STD-810G, Method 513.6, Procedures I & II

## Engineering Consulting

Edgewater's highly skilled engineering staff has extensive experience meeting the demands of major military organizations such as the United States Air Force and the Canadian Department of National Defence. To discuss the implementation of STANAG 7221 in a custom form factor or application, please contact us.

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## STANAG 7221

Promulgated by the NATO Standardization

Organization in May 2015, STANAG 7221 enables the rapid and incremental integration of robust and deterministic data-centric capabilities demanded by today's military operators while delivering those capabilities at a fraction of the cost compared with conventional approaches.

STANAG 7221 defines a broadband, real-time data bus standard for transmitting waveforms along with a series of appendices describing various physical media interfaces. Edgewater's 7221 family of network interface devices support STANAG 7221 Appendix 1, which defines interoperability on a STANAG 3838/MIL-STD-1553B data bus to deliver 100 times more data capacity while operating concurrently with existing STANAG 3838/MIL-STD-1553B signaling.

## EHS-XMC5602 Tools and Resources

- **EHS-BTM** Bus Transaction Monitor
- **EHS-BME** Bus Modeling Environment
- **EHS-SDK** Software Development Kit
- **EHS-TRN5600** Training Course
- **EHS-7221-EVK** Lab Evaluation Kit

**EDGEWATER**  
COMPUTER SYSTEMS, INC.

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