EHS-XMC6602

STANAG 7221 Compliant Network Interface Card



Product Overview

The Edgewater EHS-XMC6602 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-XMC6602 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-XMC6602 complies with NATO STANAG 7221.

The EHS-XMC6602 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.



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 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®



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-XMC6602 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

