PROTOKRAFT INTRODUCES NEPTUNE SERIES M28876 ETHERNET OPTICAL MEDIA CONVERTERS

Protokraft's *Neptune Series* Ethernet Optical Media Converters Improve Optical Network Performance and Reliability for Naval and other Harsh Environment Applications

Kingsport, TN, March 12, 2010 -- Protokraft today announced the availability of its *Neptune* Series of Fast or Gigabit Ethernet media converter solutions that improve optical network performance and reliability in harsh environment applications. Protokraft offers a complete family of M28876 based Ethernet media converters for naval optical networks.

Protokraft has introduced the *Neptune* Series of Ethernet Optical Media Converters with M28876 optical interfaces, designed for naval, military, industrial or utility applications where significant levels of shock, vibration and extreme temperature ranges are experienced. These components integrate the functions of optical transmitters and receivers into the shell of a standard M28876 optical connector. These components are intended for use in outdoor applications where small size, weight reduction and resistance to harsh environments are valued.

Protokraft's new Neptune Series Ethernet Optical Media Converters support both Fast or Gigabit and multimode or single mode fiber optic links. All versions are fully compliant with the applicable IEEE or Mil requirements.

Protokraft Neptune series fiber optic Ethernet media converters consist of optoelectronic transmitter and receiver functions integrated along with the 10/100Base-TX to 100Base-FX or 1000Base-T to 1000Base-LX or SX Ethernet optical media conversion circuitry into an environmentally sealed unit with an M28876 optical interface.

FEATURES

- Compliant with IEEE-802.3:2005 Fast or Gigabit Ethernet
- Optical fiber link distances up to 10.0 Kilometers
- Maximum optical channel bit error rate less than 1x10^-12
- Operating temperature range from -40°C to +85°C
- Shock, vibration and ESD resistant per Mil-Std-810
- Olive Drab Cadmium plating meets stringent EMI / RFI performance specifications
- Aluminum alloy case and connectors are strong, durable, corrosion resistant and light weight
- M28876 compliant optical fiber connector interface
- D38999 quadrax electrical interface provides robust interconnection to shipboard cables

The optical transmitters are high performance 1310nm FP Lasers, LEDs or 850nm VCSEL's. The optical receivers consist of GaAs or InGaAs PIN and preamplifier assemblies and limiting post-amplifiers. The optical interface to the Neptune series Ethernet optical media converters is an M28876 connector enabling interconnection to preterminated M28876 based optical fiber cable assemblies. The electrical interface to the Neptune series Ethernet optical media converters is a D38999 Size 19-18 Quadrax connector enabling interconnection to quadrax cable assemblies.

Designed to operate in harsh environments, these media converters feature excellent thermal characteristics, high tolerance to vibration and shock and corrosion resistant aluminum housings for exceptional EMI/RFI performance. Standard case operating temperature range is -40^{o}C to +85^{o}C, with a standard storage temperature range of -55^{o}C to +100^{o}C. The M28876 Series optical transmitters and receivers operate at link distances up to 10.0 Kilometers. All operate from +28.0 VDC power supplies.

Protokraft's *Neptune* Series M28876 Ethernet optical media converters are competitively priced compared

to the typical pricing for discrete media converters designed for similar harsh environments. Small quantities are available now, with production quantities of all versions available during Q'2-2010.

For additional technical specifications please contact:
Protokraft, LLC
4545 West Stone Drive
Kingsport, TN 37660
Phone: +1.423.578.7200
Fax: +1.423.578.7201
E-mail: info1@protokraft.com
URL: http://www.protokraft.com

About Protokraft, LLC
Protokraft designs and manufactures high-speed optoelectronic components and subsystems for military and harsh environment networking equipment. The company provides transceiver subsystems for short-reach (1-meter to 20-kilometer) harsh environment optical-networking connections, including optical network switches, optical enterprise and storage area networks (SAN's), and tactical optical access networks. Protokraft is located in Kingsport, TN.

Editorial Contacts:
Protokraft
Robert Scharf
Vice President of Marketing
+1.423.578.7200
info1@protokraft.com