IEEE Publishes Standard Amendment for 1000 Mb/s Ethernet Operation Over Plastic Optical Fiber

IEEE 802.3bv™ defines physical layer specifications and management parameters for home networking, industrial and automotive applications utilizing plastic optical fiber

PISCATAWAY, NJ, XX March 2017 – IEEE, the world's largest technical professional organization dedicated to advancing technology for humanity, and the IEEE Standards Association (IEEE-SA), today announced the publication of IEEE 802.3bv™—Standard for Ethernet Amendment: Physical Layer Specifications and Management Parameters for 1000 Mb/s Operation Over Plastic Optical Fiber. The IEEE 802.3bv standard amendment responds to demand for high-speed Ethernet solutions for automotive, industrial, and home network connectivity. Plastic optical fiber provides unique capabilities for these applications where long link lengths aren't required.

Increasingly, automotive and industrial networks are migrating towards Ethernet. Plastic optical fiber is already in use in automobiles and other vehicles, and IEEE 802.3bv provides a robust and reliable media option for Ethernet automotive networks. As an alternative transmission medium, the standard is also applicable to harsh, electrically noisy environments such as industrial automation islands and other applications with similar requirements.

Plastic optical fiber's non-conductive cable construction and simple installation properties are also being leveraged by telecom providers worldwide to enhance
Ethernet-based home networks for wireless network access based on IEEE Std 802.11 ("Wi-Fi®") devices.

“The ongoing expansive growth of Ethernet is driving a requirement for connectivity options that align with industry requirements, and that provide the best suited transmission medium and operational speed to meet these specific industry Ethernet application requirements,” said Bob Grow, chair, IEEE P802.3bv Gigabit Ethernet Over Plastic Optical Fiber Task Force. “The IEEE 802.3bv amendment represents an ongoing commitment to enhance the Ethernet standard in line with stakeholders’ needs to ensure optimal performance and reliability in new networking environments.”

IEEE 802.3bv is available for purchase at the IEEE Standards Store.

Deployment of technology defined by IEEE 802® standards is already globally pervasive, driven by the ever-growing needs of data networks around the world. New application areas are constantly being considered that might leverage IEEE 802 standards in their networks from wireless, through twisted-pair cabling, to fiber-optic cabling solutions. To better address the needs of all of these areas, IEEE 802 standards are constantly evolving and expanding. The success of IEEE 802 standards—from their inception through today—has been due to their fair, open and transparent development process.

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About the IEEE Standards Association
The IEEE Standards Association, a globally recognized standards-setting body within IEEE, develops consensus standards through an open process that engages industry and brings together a broad stakeholder community. IEEE standards set specifications and best practices based on current scientific and technological knowledge. The IEEE-SA has a portfolio of over 1,100 active standards and more than 500 standards under development. For more information visit http://standards.ieee.org.

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