Record Nr. UNISA996574636103316 8802-3-2021 - ISO/IEC/IEEE International Standard -**Titolo** Telecommunications and exchange between information technology systems--Requirements for local and metropolitan area networks--Part 3: Standard for Ethernet // Institute of Electrical and Electronics **Engineers** Pubbl/distr/stampa [Place of publication not identified]:,: IEEE,, 2021 **ISBN** 1-5044-7438-4 Descrizione fisica 1 online resource Disciplina 658.05 Soggetti Data processing Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Ethernet local area network operation is specified for selected speeds Sommario/riassunto of operation from 1 Mb/s to 400 Gb/s using a common media access control (MAC) specification and management information base (MIB). The Carrier Sense Multiple Access with Collision Detection (CSMA/CD) MAC protocol specifies shared medium (half duplex) operation, as well as full duplex operation. Speed specific Media Independent Interfaces (MIIs) allow use of selected Physical Layer devices (PHY) for operation over coaxial, twisted pair or fiber optic cables, or electrical backplanes. System considerations for multisegment shared access networks describe the use of Repeaters that are defined for operational speeds up to 1000 Mb/s. Local Area Network (LAN) operation is supported at all speeds. Other specified capabilities include: various PHY types for access networks, PHYs suitable for metropolitan area network applications, and the provision of power over selected twisted pair PHY

types.