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STANDARD

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8802-3

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AMENDMENT 11  
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**Information technology —  
Telecommunications and information  
exchange between systems — Local  
and metropolitan area networks —  
Specific requirements —**

iTEH Standards  
Standard for Ethernet  
(<https://standards.iteh.ai>)  
Document Preview  
AMENDMENT 11: Physical layer and  
management parameters for serial 25  
Gb/s ethernet operation over single-  
mode fiber

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*Technologies de l'information — Télécommunications et échange  
d'information entre systèmes — Réseaux locaux et métropolitains —  
Prescriptions spécifiques —*

*Partie 3: Norme pour Ethernet*

*AMENDEMENT 11: Paramètres de couche physique et de gestion pour  
le fonctionnement Ethernet en 25 Gb/s série sur fibre unimodale*



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**IEEE Std 802.3cc™-2017**  
(Amendment to  
IEEE Std 802.3™-2015  
as amended by  
IEEE Std 802.3bw™-2015, IEEE Std 802.3by™-2016,  
IEEE Std 802.3bq™-2016, IEEE Std 802.3bp™-2016,  
IEEE Std 802.3br™-2016, IEEE Std 802.3bn™-2016,  
IEEE Std 802.3bz™-2016, IEEE Std 802.3bu™-2016,  
IEEE Std 802.3bv™-2017, IEEE Std 802.3-2015/Cor 1-2017,  
and IEEE Std 802.3bs™-2017)

# IEEE Standard for Ethernet

## Amendment 11: Physical Layer and Management Parameters for Serial 25 Gb/s Ethernet Operation Over Single-Mode Fiber

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IEEE Computer Society

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Approved 6 December 2017

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**Abstract:** This amendment to IEEE Std 802.3-2015 adds Physical Layer (PHY) specifications and management parameters for 25 Gb/s operation over single-mode fiber at reaches of at least 10 km (25GBASE-LR) and 40 km (25GBASE-ER).

**Keywords:** 25 Gb/s Ethernet, 25GBASE-ER, 25GBASE-LR, 25GBASE-SR, Energy Efficient Ethernet (EEE), Ethernet, Forward Error Correction (FEC), IEEE 802.3™, IEEE 802.3by™, IEEE 802.3cc™, Physical Coding sublayer (PCS), Physical Medium Attachment (PMA) sublayer, Physical Medium Dependent (PMD) sublayer, Reconciliation sublayer (RS), single-mode fiber (SMF)

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