# 分散式被動光纖網路研究


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**摘 要**

乙太被動光纖網路(Ethernet Passive Optical Networks; EPON)近年因其低成本優勢，成為接取網路的新興選擇。在EPON傳輸資料的方式中，下載資料採用的是廣播的方式，而用戶端上傳資料則需採用分時共享的形式，由局端負責做動態的配置。由於局端與用戶端距離很長，局端的配置會有無法即時反應頻寬需求的問題，因此Foh [1]等人提出了分散式的EPON架構：FULL-RCMA。但是當ONU間常有資料需傳輸時，原始的EPON架構及FULL-RCMA都會因為這些資料會上傳至OLT而浪費頻寬。因此在這篇論文中，我們提出了一種適用於這種類型網路的新架構：DLT-PON。這種網路除了兼具分散式EPON所具有的反應較快的特性外，也比原先的EPON架構節省ONU間互傳資料所佔用的上傳頻寬，是企業、校園或大型社區在建構EPON網路時值得採納的架構。



關鍵詞 : 乙太被動光纖網路


**目錄**



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