

## Performance and cost comparisons for A-PON and S-PON FTTH systems

### ABSTRACT

The high cost of fibers has always been a main concern as to why they have not been deployed in access networks. As the fiber technology is maturing, the costs fibers are slowly decreasing, and hence the above issue is no longer an issue. This paper discusses the performance comparison of A-PON and S-PON FTTH architecture as well as its cost. It is established that the relationship between the fiber span and distributed area offered by S-PON is due to the power enhancement boosted by an amplifier. Meanwhile the cost of S-PON will be reasonable if there are enough users sharing the same feeder line or transmission path.

**Keyword:** A-PON; S-PON; FTTH; Performance; Cost