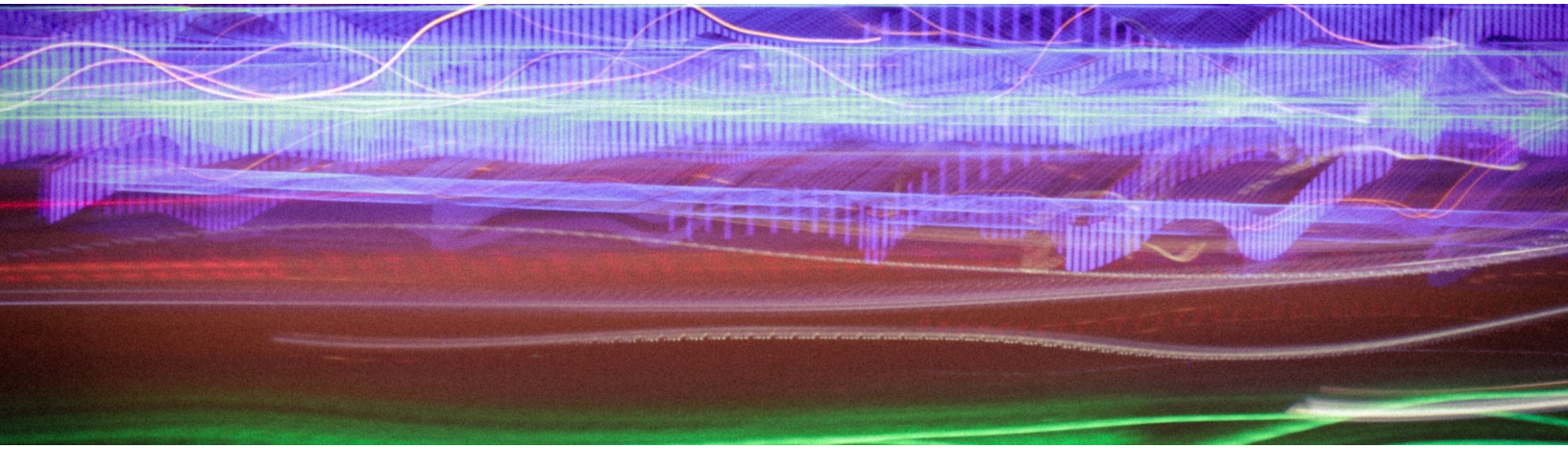
tellabs





## SM-MM Optical Splitters at a Glance

- Allows re-use of multimode fiber cabling
- Available in 2x8, and 2x16 splitter versions
- Optional support for Type-B PON protection
- Eliminates cost of new singlemode fiber
- 28dB optical budget from OLT to ONT
- Splitter to ONT MM fiber reach up to 550 m
- OLT to splitter SM fiber reach (w/o patch panel) 2x8 20km and 2x16 10km
- Supports OM1, OM2, OM3, and OM4 cable
- No power, no monitoring nor maintenance

# Tellabs® FlexSym™ Singlemode to Multimode Optical Splitter

### *Better Flexibility and Economics with SM-MM Optical Splitter Options.*

Passive Optical LAN (OLAN), which is predominantly implemented over singlemode fiber cabling inside buildings and across a campus, is not directly compatible with multimode fiber cabling. This is because many modes (i.e. shapes of light) propagate in the multimode fiber. Without control, these shapes degrade the performance of data transmission at high bit rate. Tellabs has partnered with industry leading photonic solutions provider that has developed a light shaping technology that controls how light propagates in such multimode fibers. Therefore, the intrinsic limitations of multimode fibers are mitigated and operations between singlemode and multimode fiber are made possible [Diagram 1].

This means that the coupling between singlemode and multimode fibers within an optical splitter is now enabled for OLAN. Locating this mode adaptation technology at the passive optical splitter is ideally positioned within the network as the optical splitter is one of the most important elements of a Passive Optical Network (PON) as it splits (downstream) and combines (upstream) the PON transmission wavelengths (both ITU-T 984 G-PON and ITU-T 989 XGS-PON).