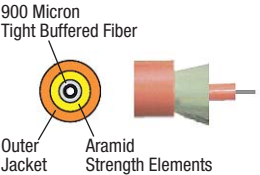

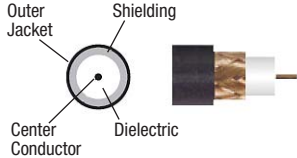




Bandwidth and application differences, between copper and fiber optic cabling

Type:	Fiber Optic Cabling	Unshielded Twisted Pair Cabling (Copper)	Coaxial Cabling (Copper)
	<p>900 Micron Tight Buffered Fiber</p>  <p>Outer Jacket Aramid Strength Elements</p>	 <p>Outer Jacket 4 Twisted Pairs</p>	 <p>Outer Jacket Shielding Center Conductor Dielectric</p>
Typical Bandwidth:	<10 GHz	<100 MHz (cat 5E)	<1 GHz (RG6)
Typical Use:	Data communication Broadcast	Structured wiring in local area networks	Cable TV / Broadcast Test and instrumentation
Benefits:	Most bandwidth. Fastest transmission speeds. Immune to EMI/RFI.	Inexpensive, relatively easy to install and terminate	Inexpensive, relatively easy to install and terminate. Can span longer distances than UTP.
Limitations:	Difficult to terminate. Most expensive cost / foot.	Maximum distance of 100m. Can be affected by EMI/RFI.	Can be affected by EMI/RFI.