



Media Types

This document gives a breakdown of how to interpret media type codes. Most of the time you will see an output (at least from Cisco CLI) that looks something like this: *10/100/1000BaseTX*

The first part (10/100/1000) gives the speed of the optic in Mbps.

The second part (BaseTX) is generally broken up into two letters (in this case TX). The below table details the meaning of the first letter:

Base Code	Meaning (all fibre except T)	Wavelength (if fibre)	Mode	Reach
T	Copper	n/a	n/a	100m
S	Short Reach	850nm	Multimode	100-400m (if using OM4)
L	Long Reach	1310nm	Singlemode	10km
E	Extended Reach	1550nm	Singlemode	40km
Z	Extra Extended Reach	1550nm	Singlemode	70km

The second letter refers to the speed and follows these general rules:

- R or H will appear on 10GB connections.
- X will appear on 1GB connections or lower.
- H tends to be verbalised as “haul” (e.g. LH is long haul single mode)



Difference between Single and Multimode

Single mode has longer distances and higher data rates but it generally more expensive.

GBIC vs SFP

GBIC refers to this:



SFPs refer to this:



Both SFPs and GBICs can be fibre or copper.

Side Notes

- LC refers to a type of fibre not SFP.
- When looking at Cisco CLI output (*show interface x*) if an optic were installed in the interface it would explicitly say **SFP**. For example, the output *Full-duplex, 100Mb/s, media type is 10/100/1000BaseTX* is *not* a copper SFP since it does not say **SFP**.